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# The Importance of Shifting from Massive to Sustainable Tourism Model: The Case Study of the City of Dubrovnik

by

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of  
Master of Science in Service Leadership and Innovation

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Saunders College of Business

Rochester Institute of Technology

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The Importance of Shifting from Massive to Sustainable Tourism Model: The Case Study of the  
City of Dubrovnik

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## **Abstract**

Tourism is currently one of the largest economical income generators for Croatia and especially for the city of Dubrovnik. Desired worldwide for its economic benefits tourism is going to double during the next 20 years. Considering mass tourism as the main definition for tourism in 21 century that cannot be neglected by current efforts to implement sustainable tourism, this paper draws attention to improved satisfaction that sustainable tourism can provide to locals and tourists operating in the city of Dubrovnik. The question of satisfaction level for stakeholders in tourism destination is connected to the psychological characteristics and motivation of tourists to visit the location. The results of this research will be useful for the Tourism Board, Mayor's office, and business owners which can use given data to create and simulate offers based on customer perception of sustainable tourism. To maximize the quality of life in the city of Dubrovnik and the quality of offer provided to tourists visiting the city of Dubrovnik for mutual benefits.

**Keywords:** Dubrovnik, sustainable tourism, sustainable development, mass tourism, tourist destination

## **1. Introduction**

In Croatia tourism is so far the biggest and the most important economic branch, contributing between 14.2 and 16.3% of the economy's gross value (Ivandić and Šutalo 2018). 2017 is being considered a year in which Croatia as a tourism destination boomed with more than 15.5 million tourists (3.5 times the population of Croatia), and over 78 million-over-night stays. Counting 8.6 billion euros in revenue has been recorded (Croatian Tourist Board,2017). Almost every year the Ministry of tourism presents new records in arrivals which have been achieved.

In 2018 which has been one more time recognized as the breaking year 19.7 million tourists with 106 million overnight stays picked Croatia as their vacation paradise. An increase of 6.5 percent has been shown as the new braking record comparing it to the previous years (eVisitor.hr,2018). Data for 2019 have been released as skyrocketing with an increase of 5% compared to 2018 which means 21 million tourists visited Croatia during 2019 and 18.2 million overnight stays have been recorded (eVisitor.hr,2019).

Despite enormous income coming from tourism as the most supported economic sector, a lot of negative aspects have been increased as well (Schubert, 2010). One of the negative sides is being associated with an increase in crime and overcrowded spaces (Recher, Rubil,2019). Through the literature review, the researcher is going to find out more about three different tourism types that can be associated with the city of Dubrovnik and Croatia in general as a tourist destination. Mass and Cruise tourism explained as two negative aspects from which Dubrovnik as a tourist destination wants to shift towards Sustainable and Alternative tourism.

## **2. Problem Statement**

“The pearl of Adriatic” which is the second name for the city of Dubrovnik has been listed under UNESCO World heritage in 1979. Today it is 2020 and Dubrovnik has been threatened to lose the UNESCO title because the city has been populated by mass tourism (UNESCO, 2019). From 2010 measuring 500,000 people coming to the city to 2019 where the record of 1,4 million visits or 4,4 million stays has been measured (Dubrovnik Tourism Board, 2019). The biggest problem in tourism is related to cruise ships that are coming to Dubrovnik 5 out of 7 working days. Each cruise ship is bringing around 2,000 guests coming to Dubrovnik, which is the main reason for crowded places and tourists being recognized as non-spenders (Mayor Office, 2018). This kind of tourism where the mentality of “quantity is better than quality” keeps up tourists will shift to other tourist destinations and Dubrovnik will run out of business due to overcrowded spaces and ruined guest experiences.

The purpose of this quantitative study is to discover if sustainable tourism will improve the overall satisfaction of locals and tourists in the city of Dubrovnik.

## **3. Research Questions**

- 1.** What are the benefits of implementing Sustainable Tourism for the City of Dubrovnik?
- 2.** How sustainable tourism will improve the overall satisfaction of locals in Dubrovnik?
- 3.** How sustainable tourism will improve the overall satisfaction for tourists coming to Dubrovnik?

## **4. Literature Review**

### **4.1. Mass Tourism**

Mass tourism is one of the most common tourism terms being used across the world. Conceptually mass tourism is being defined as an “ambiguous” term, lacking a clear definition (Torres, 2002). The aim of the “Rethinking Mass Tourism” scholarly article was to look at mass tourism from a geographical view, not from the scholarly view which relates mass tourism with sustainability, alternative tourism, or development. Mass tourism is being defined as tourism in which mass production is also being defined as “Fordism” (Boorstin 1964).

For example, mass tourism is not being achieved if the four main categories are not met. The holiday itself is being standardized, it has been mass-produced with a meaning for more people to consume it at the same time. It has been massed market to not clearly defined market and by consuming the service there is no consideration of local norms and culture (Poon, 2003). During the 1960s and 1970s increase in tourism changed the tourist perspective towards travel implying that something has been lost during this process.

Standardization has been mentioned as the main problem where there is no more individual approach. Production was concentrated on package tours which are being controlled by tour operators (Boorstin, 1964). The quality of mass tourism is designed to be culturally poor and commoditized where standardization of tourist experiences is being in place (Boorstin et al, 1964). Participation in mass tourism is not voluntary for the destination to decide. Tourists are easily guided and interested in the familiarity of the destination population.

Factors such as sea, sun, and sand have been promoted as main selling points without any interest in local culture and heritage (Cohen, 1972:169). Since the 1980s alternative and sustainable tourism have been introduced as the opposite of mass tourism. New ways of tourism



have been concentrated towards destination culture, economic friendliness, and non-mass production (Welk, 2004). In general, tourists as participants are also being considered a part of the mass leisure phenomenon.

Mass tourism is being considered as a stage towards mega tourism (Sharply, 2000). Other tourism models such as eco-tourism or alternative tourism are being made from different combinations and surroundings that one location can offer to its visitors. Mass tourism is aiming for a large-scale activity that mass can consume at the same time and for this reason, there is no fixed number of people related to the meaning of mass tourism. It depends on the individual perception of how much is too many (Bramwell, 2004).

Package tours have been associated with mass tourism in a way where integrated products are fulfilling offer which tourism agencies are selling to masses. Package tours are structured in a way of including visits to the main attractions that the city can offer (Aguilo et al., 2005). Tourists are being considered as experience producers where does not matter how structured a package tour is every tourist can create an experience for themselves (Lofgren, 1999).

Mass tourism stands for itself and it is a certain style of doing tourism in one tourism destination. Compare to other styles of doing tourism being mixed all at once where mass is not being recognized because one group of tourists is being at the beach, another group is learning how to do agriculture in fields and the third group is exploring the city center. In this way, people are being equally distributed through one tourist destination. The number of tourists is still the same, but they are not at the same spot at the same time and they are not creating mass overcrowded places (Vainikka, 2013).

## **4.2. Cruise Tourism**

Many cruises at the same place can open the question of the sustainability of cruise tourism in one destination. What the positive and negative impacts of cruise tourism on the city which participates in this model of tourism are? How many guests from cruise ships are participating regarding spending on the destination? Dubrovnik as a tourist destination is one of the recent examples where cruise tourism is leading to mass tourism and vice versa (Nadramija, 2017).

Cruise tourism as a tourism model is one of the fastest-growing segments in leisure travel. The first most attractive destination for cruising tourism in North America and the second biggest market in the Mediterranean Sea (Cruise Lines International Association, 2010). Dubrovnik is being recognized as the second strongest destination after Venice (Italy). Mainly the popularity of Dubrovnik as a destination stands in the geographical position as a port of call which is a transit destination. Transit destinations are those in which guests are not staying overnight rather being there for a maximum of 11 hours. Homeports are being defined as those from which cruise journeys are starting and ending (Perušić, Puh, 2012).

Mega cruises are one of the huge problems for the city of Dubrovnik because mega-ships can bring 2000 passengers and over. During the summer season cruises are docking in Dubrovnik for 5 out of 7 days. Each time when cruises are in town city is suffering a tremendous number of people at the same spot at the same time. What is the confirming definition of mass tourism and overcrowded spaces (Nadramija, 2017)? The city of Dubrovnik covers 80% of cruise tourism in Croatia, other cities are Split, Zadar and Rijeka.

In 2016 Dubrovnik was visited by 638 ships with 881.956 tourists visiting the city of Dubrovnik. In 2015 Dubrovnik had 601 and 2014 577 ships docking in the port of Gruž. Each

year numbers are growing, and cruise companies are putting Dubrovnik as a must stop in their itineraries (Dubrovnik Tourist Board 2018). The results of cruise tourism increase in the city of Dubrovnik can be seen through everyday traffic jams, disturbance of local residence, overcrowded spaces, and negative image of Dubrovnik as a tourist destination. The main cruise traffic is accruing through May, June, and August (Tourism Board of Dubrovnik, 2018).

Cruises coming to Dubrovnik are staying for 13 hours from which five to six are being reserved for guests to leave the boat and visit the location. Dubrovnik as a tourist destination needs to satisfy on average 2000 cruise guests with an offer which the city can provide. Due to the short time of visit all tour packages are being booked before the boat docks at the destination (Caric, 2011). Cruise companies are taking 20% of the provision for booking the tours on their boats. Dubrovnik is offering 5 main package tours such as Jeep Safari, Horseback riding, and three Island tours. Island tours are being divided into groups where each tour lasts up to 3-4 hours. The remaining time is being reserved for sightseeing of Old Town (Krajina, 2013).

The average longer tour offered in Dubrovnik for cruise guests is up to 66 euros and shorter excursion up to 62 euros. Where 77% of cruise tourists are staying full time at the destination and 33% are staying up to 3 hours. 42% of cruise tourists are choosing a package or organized tour, 69% are willing to explore the city of Dubrovnik on their own, 81% are consuming local drinks, and 48% local food offers (Matković, Pranić 2010).

After closely examining data from the Institute of Tourism in the City of Dubrovnik average cruise guests spends 41 euros and the crew spends 26 euros. The ratio of crew members being on the ship can be easily determined as on each 2-cruise guest 1 crew member is assigned (Pavlić, 2010). In 2013 Dubrovnik has been visited by 1.176.007 tourists coming from cruise ships and 2013 is still recognized as a record number in Dubrovnik cruise tourism visits.

Revenue from cruises in 2013 was 48.216,287 euros in total where 6.115,226 euros is coming from crew members (Pavlić, Portolan 2010).

Port of Dubrovnik as every port is profiting from having cruises coming into a destination.

**Table 1. The most significant incomes coming from cruise ships are the following:**

Fee Type	Amount
Pilot Fee	800 Euros
Local Navigation and Lighthouse usage	From 2000 to 3000 Euros
Docking Fee (Depends on ship size and amount of people being on a cruise ship)	1000 Euros
Taxes and Hours Stayed in Location	From 8000 to 10000 Euros
Garbage Disposal Fee	From 50 euros for m3
Water and Electricity Fee	4 euros per m3

The total amount of income for the port of Dubrovnik in 2018 was 5.523.750 euros (Port of Dubrovnik, 2018).

The city of Dubrovnik generates income from bus providers who are driving cruise guests from Port of Gruž to the Pile Gate (Old City Center). The estimated income for 2018 was 653.594,771 Euros (City of Dubrovnik 2019). For generating huge amounts of income the city of Dubrovnik and the port of Dubrovnik are major income earners. Being able to earn so much during only 3 months of high season is an impressive and positive side of cruise tourism.

Negative sides can be seen through marine and coastal systems that are being destroyed by mega cruisers, air pollution by each mega-ship which only in one day can pollute the air as the city of Dubrovnik for the entire year (Mayor Office, 2019). The city of Dubrovnik does not

have sustainable waste management for the city itself. The average person on ships produces 1 kg of burnable waste, 0,5 kg of food waste, and 1 kg of plastic waste per day (Johnson 2001). Another major problem for the city of Dubrovnik is the lack of planning and waste disposal resources. Waste is being collected from the ships and not properly recycled where the disposal is used rather than recycling (Nadramija, 2017).

Cruising tourism has negative impacts on local residence quality of life due to the short time of the visit by an enormous number of people impacting living space. A destination such as Dubrovnik does not have an integrated and developed infrastructure for residence isolation from tourists coming to the destination (Pavlić, 2013). The highest number of tourists from a cruise ship in August 2019 was 4040 every day (Port Authority Dubrovnik) combined with 3.500 stationary tourists and 3000 visitors (Dubrovnik Tourist Board) equals more than 10.000 tourists per day.

A study which was done on the example of the city of Dubrovnik “Attitudes of citizens of Dubrovnik towards the impact of cruise tourism on Dubrovnik” (Perušić, Puh, 2012) indicates the following data:

1. 96% of locals recognize tourism as the main branch
2. 93% of locals consider moving cruise visits from the main season into the postseason
3. 64% which is half of the local population consider cruise visitors not good consumers

Citizens of Dubrovnik are aware of both the positive and negative impacts that the cruise industry is offering. To continue developing Dubrovnik as a tourism destination Major office and Tourism Board of Dubrovnik need to find a better way of organization of cruises that are coming to town with tourists who are staying in Dubrovnik alongside local residence wishes and desires (Perušić, Puh, 2012).

### **4.3. Sustainable Tourism**

Sustainable tourism is a tourism model that focuses on economic, social, and environmental factors. Sustainability strives towards a balance between three main factors to create an environment in which tourists' wishes and desires will be met alongside with wishes and desires from locals living in a tourist destination (Sorensson, 2010). Harris and Leiper defined sustainable tourism as “not using non-renewable resources faster than renewable substitutes can be found for them”. Sustainable development has been divided into very weak and very strong positions.

A very strong approach is arguing how sustainability in the destination cannot be achieved if natural resources are not being used. In opposite arguing through a very low approach technology and natural resources should be combined to achieve sustainability and economic growth (Sorensson, 2010). Sustainability concepts helped to draw attention towards better management of energy savings, recycling, and reduction of waste to improve the living standards of the local population (Mihalić, 2010). To achieve sustainable tourism basic requirements must be met.

First, everything is about the communication of sustainability ethics, supported by environmental awareness to stakeholders on both sides of demand and supply. Second, all relevant stakeholders in destination, critical mass, and political leadership should work together towards implementing sustainability. Third, tourism is about satisfaction and all tourist's wants and needs should be met for tourists to pay for their sustainable vacation (Mihalić, 2010). The concept of responsible tourism includes accountability, the capacity to act, and the capacity to respond to customer wants and needs (Goodwin, 2011).

Tourist destinations are in different stages of their tourist life cycle and to achieve the status of sustainable destination actions should be done. Accommodation providers changing their water, energy, and garbage management. Investments are high but in the long-run reduction of water and energy consumption will pay off. Reducing the number of cars on the streets with electric bikes, scooters, or persuading tourists to walk. Social aspects of tourism can be enhanced by implementing a culture and social aspects to the destination (Sorensen, 2010).

Providing learning hands-on approach where tourists can learn how to cook local food through nature and gastronomy classes. Enhancing rural tourism where tourists are not coming just for the high season rather being distributed all year round. Strategic sustainability issues are different and depend on tourist destination capacity and resources (Sorensen, 2010).

Changing tourist's perspectives is hard and that is why tour operators are considered a key influencer towards the process of changing from Mass to Sustainable tourism (Tepelus, 2003).

Tour operators are travel agencies that are using their know-how combined with resources to bring together buyers and sellers. The purpose is to "package" services into one product that is being marketed and sold at one price directly or through other smaller tourist agencies (Tepelus, 2003). According to the level of tour operator companies' involvement, there are four categories:

1. **Opportunistic suppliers** which are selling nature of location without any concerns about environmental or cultural impacts
2. **Sensitive suppliers** are organizing a small number of tours because they are introduced with problems in a tourist destination
3. **Constructive suppliers** who are selling mass packages, but they are active in the community in which they are operating by donating a portion of their income to destination

4. **Pro-Active suppliers** who are empowering sustainability through a service provider with which they are creating business

These categories are just one form of “good practices” which tour operators are employing, and which can be used to shift and create awareness about mass disturbance to the destination (Tepelus, 2003).

Small scale initiatives in sustainable tourism can be positive towards reducing negative aspects of mass tourism. But at the same time, they are small and cannot meet the needs of mass requirements (Budeanu, 2005). The importance of tour operators is laying down in offering bulk products to the brother audience at affordable prices. To keep prices low and competitive, the carrier must maintain a certain level of occupancy. Each plane needs to take off at the scheduled time of departure with 5 or 100 people flight cannot be canceled due to a low occupancy rate.

In this case, tour operators are setting “last minute offers” which are attracting customers who are willing to pay a low price for their vacation. For both time-consuming and price tour operators are desired by consumers. Having a great amount of influence on consumers and service providers, tour operators are influencing the distribution of tourists across tourist destinations (Budeanu, 2005).

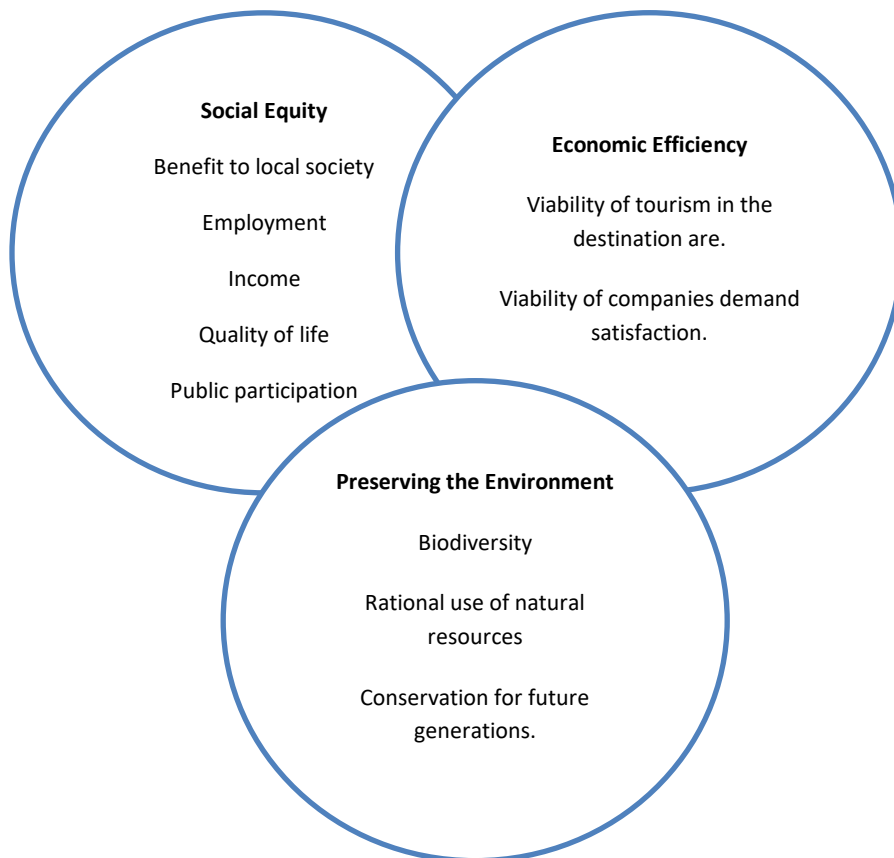
Using the leadership role and goodwill towards change tour operators are game-changers in future tourism. By setting their requirements which businesses need to follow to make new offers that will help society make progress in achieving sustainability in a tourist destination (Budeanu, 2005).



#### 4.4. Sustainable Tourism Model

After closely reviewing the sustainable tourism model by M. Victoria Sanagustin mentioned in the research “Rural tourism: A sustainable alternative”, which was closely drawn from Hall (1988). The researcher aims to use the sustainable tourism model as a base for the construction questionnaire. To test the Sustainable model on the example of the city of Dubrovnik questions will be divided into three subcategories: Social equity, Economic Efficiency, and Preserving the Environment components. Each category is presenting an ideal sustainable implication process to fully transit into Sustainability from other types of tourism (Fons et al., 2010).

**Fig. 1. Sustainable Tourism Model. Source: Drawn up from Hall (1998)**



## **4.5. Local Impact & Tourist Profile**

Strategic development management should be employed in every tourist destination. Key aspects for driving development management are the protection of the environment in which tourism is being active and sustainable development of tourist destinations (Ljubičić, 2015). Balanced development is needed if a tourism destination is already suffering from mass tourism and a lack of clear strategies can lead destinations towards extinction (Ljubičić, 2015).

Insufficient infrastructure and badly organized flow of tourists in destinations pose very serious problems for branding and attracting new people to come in. Sustainable tourism in a destination needs to act as informative, creating integrity between locals and tourists, it is beneficial for locals and it is preserving natural and other resources that the destination has to offer (Ljubičić, 2015).

The local impact can be measured by satisfying five different preservation categories:

1. Needs and wants of locals are satisfied and quality of life is rising
2. Keeping the socio-cultural identity of the destination
3. Development of high-quality tourist offer
4. Quality of experiences is high
5. Keeping resources for the next generations

Tourists are making huge impacts on historic city centers through engagement in cultural activities. The local community is also suffering from the mass collection of individuals in the most popular urban destinations. Firstly, the number of visitors is increasing and secondly through huge demand for rental accommodations such as Airbnb (Hernandez et al., 2017).

Occupation of the public space is being categorized through a high concentration of visitors at one spot which is affecting mobility and usage of public space. Car parking and traffic management are highly problematic especially when multiple channels of guests coming in are being used. Competition for the usage of public space is being high. Local business is trying to get more public space for business presentations. Mainly souvenir shops, restaurants, and café bars are being placed in city centers (Hernandez et al., 2017).

Another tourism impact can be seen through the rental of accommodation houses, villas, and apartments. Big corporations such as Booking.com and Airbnb are allowing almost everyone to register and list their properties on their sites. Renting homes is being called urban tourism, where the structure of building more apartments and houses is changing the shapes of city centers (Hernandez et al., 2017).

Local people are starting to abandon their homes to rent them to tourists and move further from city centers. The loss of the local population attracts new investors who are opening a tourism-oriented business. Offer for local residence is being reduced and almost not existing. This process is being recognized as a big threat for safeguarding the heritage values of historic landscapes (Fernandez et al., 2017).

Regarding economic factors of tourist destinations positive effect on tourism is better employment opportunities, higher income for local businesses, and quality of life is high (Diedrich & Garcia-Buades, 2009). Negative aspects are seen through the generation of the low-paid temporary workforce, unstable employment which increases costs of living, and having companies that are not reinvesting earned money back to the destination from which income was earned (Gutierrez, 2010).

Social dimension in positive aspects tourism is contributing to better standards of living, cleaner communal spaces, preservation of resources (Lankford & Howard, 1994). Negative impacts are loss of traditional values, crowded spaces, an increase in crime, drug abuse, and a decrease in resident hospitality (Liu & Var, 1996).

In the cultural dimension, positive impacts are the preservation of local products and culture through cultural interactions between tourists and local residence (Besculides, Lee, & McCormick, 2002). Negative aspects of cultural dimensions are loss of tradition, acculturation, the trivialization of local culture and heritage (Besculides et al. 2002).

In the environmental dimension, positive impacts are being associated with the creation of awareness of environmental preservation (Tomljenovic & Faulkner, 1999). Negative impacts are the destruction of environmental spaces such as pollution, degradation of vegetation (Andereck, 1995).

#### **4.6. Tourist Profile**

According to the study “Socio-Demographic profile of the visitors of the city of Dubrovnik” conducted by D. Karamehmedović guests are mostly belonging to a group of 30-39 years old. Cultural tourists are being in a group of 20-29 years old. For young visitors, age 21-30 culture and historical attractions are the main reasons for visiting the city of Dubrovnik. Visitors from the UK are leading and the highest share in the total number of visitors for the 2015 season in Dubrovnik were tourists from the UK (Tourist Board 2016).

Visitors from the UK, France, Spain, and Italy have the biggest likelihood to visit Dubrovnik regarding culture and heritage which Dubrovnik as a tourism destination can offer. Tourists interested in City Walls and built heritage sites around Dubrovnik were from Japan,

Argentina, New Zealand, Mexico, the Benelux countries, Mediterranean Basin countries (Karamehmedović, 2018).

Dubrovnik as a tourist destination does not have loyal guests. 81% of tourists are visiting Dubrovnik for the first time in their lives, 73% knew the city before visiting. And the most frequent mode of transportation is by plane (Karamehmedović, 2018). The main motive for visiting Dubrovnik is “Sun and Beach” which is being followed by “rest and recreation” and “culture and religious” motives. The fourth place is being reserved for ecotourism followed by business, health, and wellness, and at the last spot by sports-related visits (Karamehmedović, 2018).

The core of quality that a destination can offer is coming from the quality of “tourism/destination product”. If the destination is being creative, unique, and full of memorable experiences. Tourists will create a desire for visiting the place again which increases loyalty and the chance for the destination to be more sustainable by expanding tourism season and attracting guests all year round.

The quality of heritage sites and resources which city of Dubrovnik possesses can be achieved only in resources that are being used sustainably. Where maintenance of local destination is being set in pace and where guest management systems are being aligned with tour operators. The quality of service provided depends on the number of people being in town. High quality in destination service leads to the quality of tourism in destination, the quality tourism leads towards sustainability and sustainability leads towards economic benefits for tourists and locals (Karamehmedović, 2018).

## **5. Methods and Evaluation**

### **5.1. Research Design**

The research design of this study is the scientific method (or quantitative). The goal of the study is to use a reductionist approach and evaluate the economic benefits of shifting from massive to sustainable tourism on the example of the city of Dubrovnik. The scientific research method design will enable the researcher to a closer understanding of the benefits which sustainable tourism can offer to all stakeholders involved in tourism operations. Finally, using overarching theory to guide the study, self-determination theory will be used to test researcher questions.

### **5.2. Strategy of Inquiry**

For this quantitative research as a strategy of inquiry, the researcher decided to use the survey method. This method is useful for gathering firsthand experience from selected participants. The information collected through surveys will be useful because the researcher will be able to generalize the population on a large scale using systematic procedures. The reason why the researcher is using the survey method is that survey is most useful when a big amount of data needs to be collected in a time-efficient, cost-effective, and structured way.

### **5.3. Setting and Sample**

This quantitative research named “Dubrovnik Vision -2030” was done in the city of Dubrovnik from June to October of 2020. Data were collected from four significant groups for this study:

1. Major Office
2. Residents (Living in City of Dubrovnik)
3. Tourists (Coming to Dubrovnik by different transportation channels)

#### 4. Local Businesses (Operating inside the City of Dubrovnik)

The participants were selected from the population using random sampling. The researcher considers a simple random sample being beneficial because it gives equal chance to every participant to be selected and bias towards the collection of data is being reduced. Due to random sampling, a sample that is representative of the population can be effectively drawn.

### **5.4. Measurement Instruments**

For purposes of gathering useful data, the researcher decided to use two constructed surveys. Questions were structured in comprehensive sentences on which participants were able to express their opinions through a 5-point Likert scale. The scale ranges from 1 (strongly disagree) to 5 (strongly agree). To come up with the solution from which stakeholders will benefit, the researcher would like to discover how many average guests are spending in Dubrovnik by comparing income coming in from two crucial tourist groups into Dubrovnik. Firstly, tourists coming from Cruise Ships and staying in a tourist destination (Dubrovnik) for 1-4 hours. Secondly, a tourist coming either by car, plane or other transportation service and staying in Dubrovnik for 1-3 days

### **5.5. Procedure**

The survey was a self-report and cross-sectional survey. It was administered to all stakeholders in organized stages. Through the first stage, a questionnaire was distributed to the residents before the summer season with the starting date which was from June first. In the second stage, questionnaires were given to tourists and local businesses during the high season which is defined as mid-August. To ensure transparency and confidentiality, participants of the survey were separated. Surveys were conducted in the presence of a facilitator, who was

responsible for explaining the instructions and ensuring that the survey is completed truthfully. Also, to encourage tourist's participation, rental car coupons were given as complimentary for their contribution to the study. Before the final survey was distributed the researcher employed pilot or testing of the survey among 10 locals and 10 visitors. To generate feedback about survey design which resulted in positive feedback and further data collection was enabled.

## **6. Data Analysis**

For analyzing data, the researcher used descriptive statistics to assess given information about the economic benefits of sustainable tourism. This method helps the researcher to understand actions that are highly rated by survey participants for Dubrovnik as a tourist destination to shift from massive to sustainable tourism. After the descriptive statistical analysis is being done researcher used exploratory factor analysis. Exploratory factor analysis enabled the researcher to group survey items into subcategories. Descriptive statistics were used as well to assess the level of stakeholders' engagement in process of shifting from massive to sustainable tourism. In the end, Multivariate analysis (MANCOVA) was used to establish a relationship between the given results in examined subgroups.



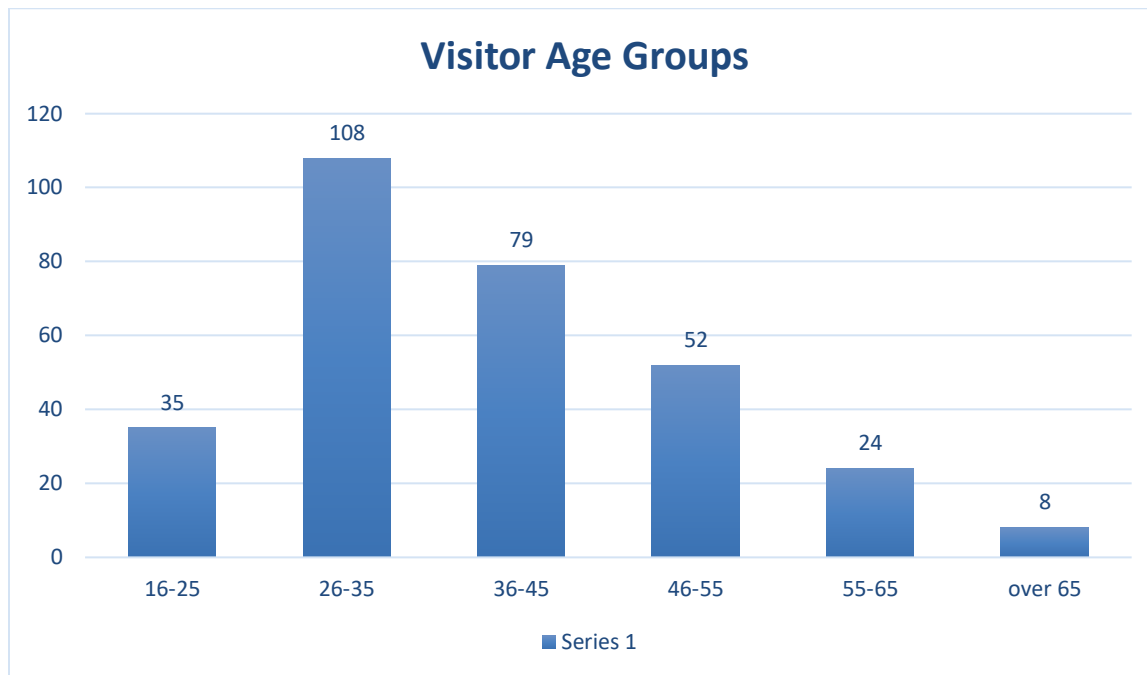
## **Data Analysis-Dubrovnik Vision 2030**

### **6.1. Visitor Data**

The visitor survey included a total of 300 participants which number matches the number of local citizen participants after 7 incorrectly filled surveys were eliminated. As stated Table 2 indicates that the biggest number of visitors who visited Dubrovnik during the summer season 2020 are coming from the following countries: the UK, the USA, Spain, Poland, Croatia, and France. Out of 300 visitor respondents, 52.12% are female and 47.88% are male.

One of the questions posted was related to the nights stayed in the city of Dubrovnik. Most visitors stayed on average of 1-3 nights (45.60%) in the destination. Following the second biggest group staying on average from 4-7 nights (32.90%), this was not the case during previous summer seasons. 13.36% of respondents decided to stay in Dubrovnik over 7 nights and only 8.14% stayed just for a day in the city of Dubrovnik. For the research purposes, the stays of one day were too short and respondents who stayed more than one night in the destination were considered valid.

**Chart 1. Visitor Age Groups**



**Chart 1** represents visitor age groups. The largest number of respondents are belonging to the age group of 26-35 making 35.29% following by a similar percentage for the age groups 36-45 (25.82%), 46-55 (16.99%), 16-25 (11.44%), 55-65 (7.84). The least represented group was in the category of over 65 years old with 2.61%.

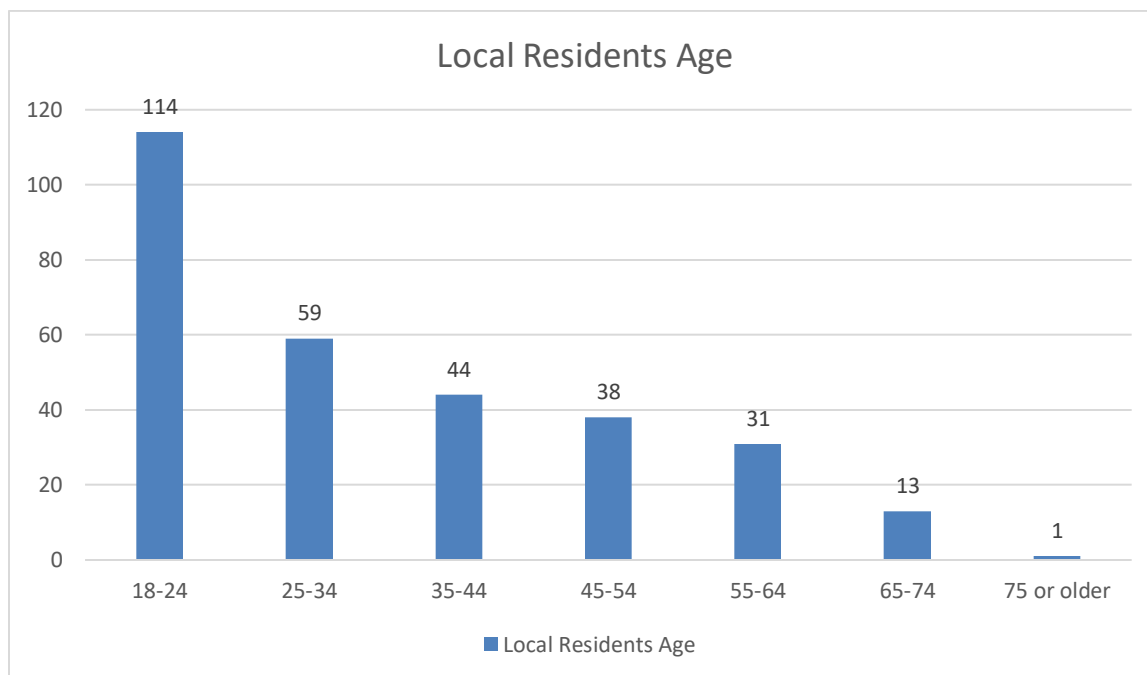
**Table 2. Visitor location is based on countries from which they visited Dubrovnik during the summer season of 2020.**

Country	Number of Respondents	Total Number
1. UK	40	300
2. USA	36	300
3. Spain	35	300
4. Poland	33	300
5. Croatia	29	300
6. France	28	300
7. Ireland	12	300
8. Austria	11	300
9. Australia	11	300
10. Sweden	10	300
11. Germany	9	300
12. Belgium	7	300
13. Canada	6	300
14. Czech Republic	6	300
15. Hungary	5	300
16. Norway	5	300
17. Finland	4	300
18. Italy	4	300
19. Slovenia	3	300
20. New Zealand	3	300
21. Lithuania	3	300

## 6.2. Local Data

The research included a total of 300 local citizens out of 315 responds researcher eliminated 15 samples that weren't fulfilled correctly. Out of 300 valid respondents, 36.75% are male and 63.25% are female. The largest number of local citizens are working in tourism-related sectors (74), following by occupations in Management (35), Education (31), Business (28), Sales (20), Art (19), Healthcare (16), and Social (12), occupations. Less represented working sectors are IT (11), Community (9), Food preparation (9), Administration (9), Farming and fishing (8), Architecture (7), Healthcare (7), and Legal occupations (6).

**Chart 2. Local Residents Age**



**Chart 2** represents local population age groups. The largest number of respondents are belonging to the age group of 18-24 making 37.75% following by a similar percentage for the age groups; 25-34 (19.54%), 35-44 (14.57%), 45-54 (12.58%), 55-64 (10.26%). The smallest group of respondents was in the age group of 65 and older is only represented as (5.29%). The 51.32% of respondents are living outside the Old City, only 10.93% are living in the Old City of Dubrovnik, 37.74% are living in the suburban places such as Mokošica, Komolac, Konavle, and Župa.

### **6.3. Benefits of Sustainable Tourism**

The researcher constructed the survey to find out the perception of locals and tourists regarding the sustainability model and if Dubrovnik as a tourism destination should shift towards a more sustainable way of doing business. After questioning 300 local citizens 94.07% of respondents stated that Sustainable tourism is highly important and that it should be the future standard of travel. Only 4.64% stated that they don't care and 0.66% expressed how sustainable tourism is not important at all. From the mention numbers, the researcher can see that the interest or knowledge regarding sustainable tourism exists among residents and that there is a desire towards the change.

**Table 3. Benefits for implementing Sustainable Tourism-Local perspective**

Factor	Importance in %	Total Respondents
Culture and Cultural Heritage	<b>73.18%</b> or 221 respondents	100% or 300
Nature Preservation	<b>70.86%</b> or 214 respondents	100% or 300
Ecotourism	<b>52.98%</b> or 160 respondents	100% or 300
Environment and CO2 Emissions	<b>44.37%</b> or 134 respondents	100% or 300
Politics	<b>9.93%</b> or 30 respondents	100% or 300

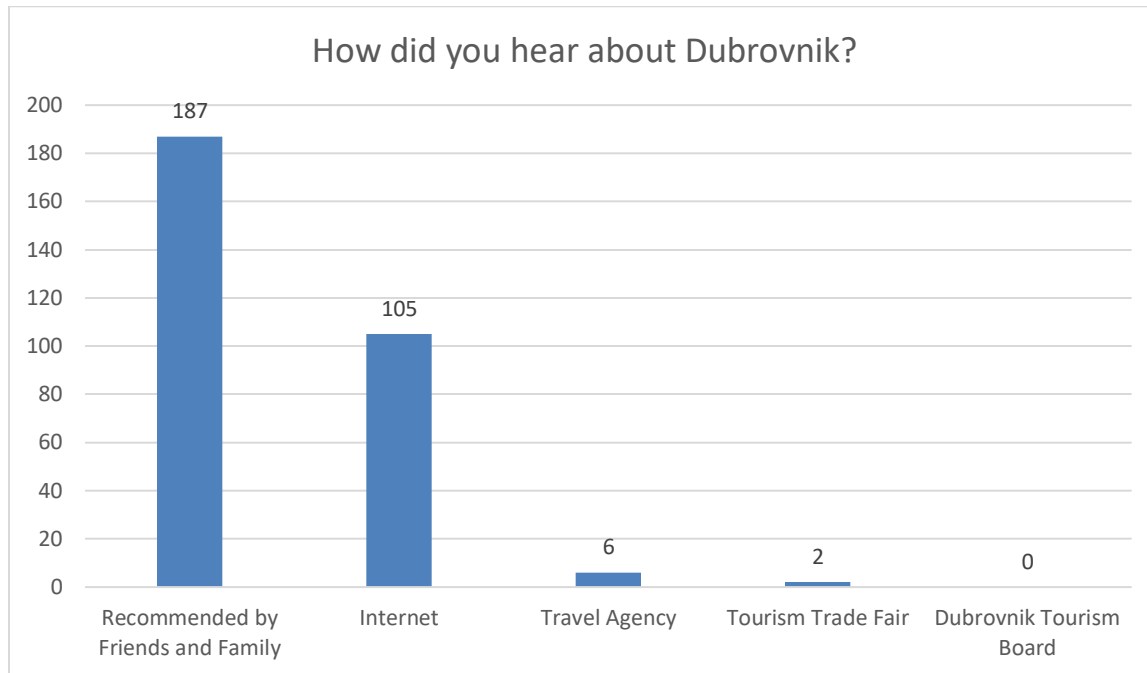
**Table 3** indicates that 73.18% of respondents are finding Culture and Cultural heritage as the crucial benefit which can yield from sustainable tourism. Following a similar percentage of 70.86% of respondents finding nature preservation as the second most important benefit in regards to sustainability. Half of the respondents listed ecotourism as the desired factor which can be implemented in the city of Dubrovnik in the amount of 52.98%. Almost half of the residents 44.37% find the environmental and CO2 emissions going down with the sustainability model. And only 9.93% of respondents consider politics as important in the sustainability implementation process. “Sustainability” does not happen overnight and in some cases, it might be closed tight to local mentality. The researcher also wanted to understand if residents are already practicing sustainability during their private travels to other destinations.

Question number 7 in the “Dubrovnik Vision 2030” questionnaire for local was constructed to understand the local perception of the sustainable offer. 52.98% of local

respondents stated that they are always seeking sustainable offers, tours, and accommodation offer but the price of the services or goods is the deciding factor. Finding the price important in the decision-making process sustainable offers should be equal to standard offers or cheaper to attract Dubrovnik residents to purchase them. 21.85% of respondents stated that they are consuming sustainable offers and goods without price consideration. And an almost similar percentage of 25.17% of residents don't look for sustainable offers, tours, or products.

But after similarly constructing this question "Would you be willing to pay more for sustainable offers" 78.47% of respondents stated yes but the price is the deciding factor. 13.89% of respondents stated yes without consideration of the costs. An extremely low percentage of 7.64% of respondents stated that they don't want to pay more for sustainable offers. Local citizens are willing to consumer sustainable offers and products but the price will be a determining factor. This is one of the main pinpoints which need to be taken seriously to convey locals to use more sustainable offers as the interest is high. We can see how the percentage of 25.17% of locals who stated that they don't look for sustainable offers does not mean that they are not willing to use them eventually if the sustainable offer is being priced right.

**Chart 3. Marketing Channels of Dubrovnik**



**Chart 3** represents marketing channels that have been used by visitors to create awareness about Dubrovnik as a tourism destination. 187 visitor respondents heard about Dubrovnik as a tourism destination through recommendations either by their friends or family. The Internet is the second biggest marketing channel through which visitors found information about Dubrovnik as a tourism destination. Travel agency and tourism trade fair resulted in a very low response rate.



**Table 4. Age groups and countries for respondents who visited Dubrovnik based on friends and family recommendations.**

Country	Number of Respondents	Total Respondents
1.UK	27	187
2.Croatia	26	187
3.Spain	25	187
4. the USA	18	187
5.France	15	187
6.Poland	13	187
7.Australia	8	187
8.Austria	7	187
9.Sweden	6	187
10.Ireland	6	187

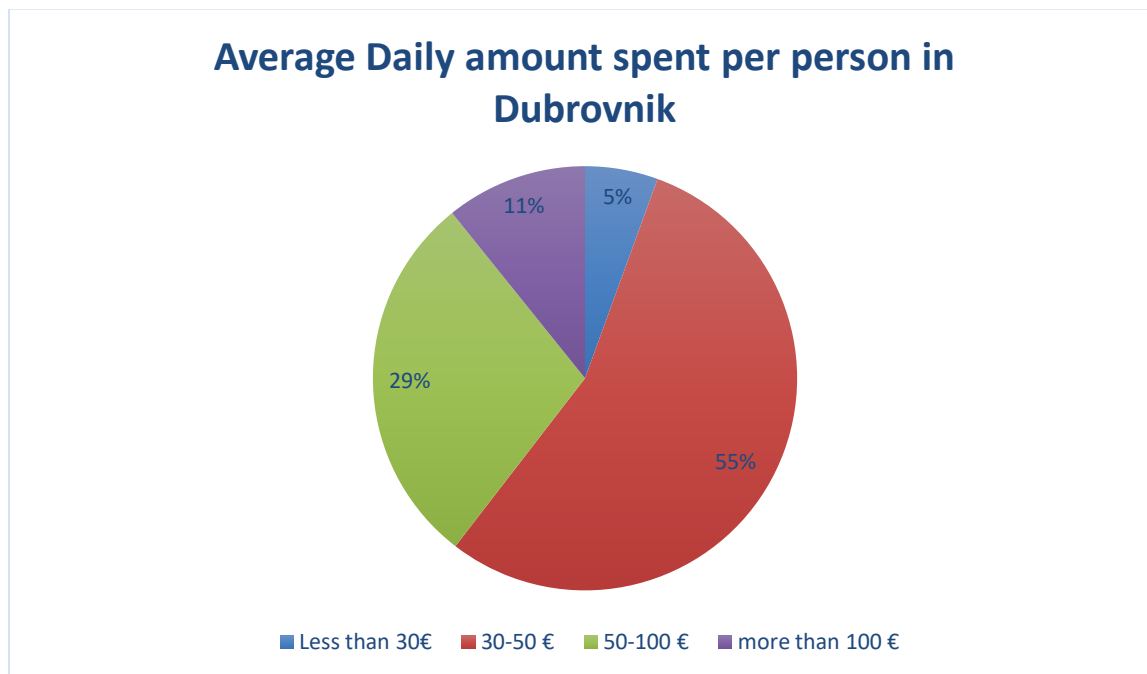
**Table 4** represents the top 10 countries from which respondents who answered the previous question that they heard about Dubrovnik through recommendations either by friends and family are coming from. The rest of the Country ranking can be found in the appendix (Table 4). We can see that the top 3 countries are the UK, Croatia, and Spain. The following countries are the USA, France, and Poland. If the table is being used for marketing purposes to attract the travelers for the next seasons in Dubrovnik we can conclude that countries which are being placed onto the first six positions are relating to friends and family recommendations mainly.

**Table 5. Age groups and countries for respondents who visited Dubrovnik based on Internet promotions.**

<b>Country</b>	<b>Number of Respondents</b>	<b>Age Groups of Respondents</b>
1.Poland	20 out of 105	26-35 (15 out of 20) 36-45 (5 out of 20)
2.France	18 out of 105	16-25 (3 out of 18) 26-35 (9 out of 18) 36-45 (2 out of 18) 46-55 (4 out of 18)
3.Ireland	15 out of 105	26-35 (14 out of 15) 36-45 (1 out of 15)
4. the USA	13 out of 105	16-25 (1 out of 13) 26-35 (2 out of 13) 36-45 (7 out of 13) 46-55 (3 out of 13)
5.UK	8 out of 105	26-35 (3 out of 8) 36-45 (5 out of 8)
6.Spain	5 out of 105	16-25 (1 out of 5) 26-35 (4 out of 5)

**Table 5** represents the top 6 location and age groups of visitors who chose the internet as a marketing tool from question number 7 in the visitors' survey (“How did you hear about Dubrovnik as a tourism destination”). The rest of the countries can be found in the appendix (Table 5). The top three positions are held by Poland, France, and Ireland visitors. Following by USA, UK and Spain visitors. From the table above, we can see that visitors who are coming from the first six countries are belonging to the age group from 26-35 years old. To target these guests marketing efforts should be aligned into google ads, social media, and general online promotions.

**Chart 4. Average Daily amount spent per person in Dubrovnik**



**Chart 4** represents the average daily amount spent per person while staying in Dubrovnik. 55% of visitors spent 30 to 50 euros daily while being in the location. 29% spent in the range from 50 to 100 euros. 11% spent more than 100 euros daily and only 5% spent less than 30 euros. From the given data researcher could see that guests are spending a significant amount of money daily on offering which Dubrovnik as a tourism destination has to offer. 68.95% of tourists stayed in private accommodation such as apartments. 13.07% stayed in a hotel, 11.77% with friends and family and 6.21% choose B&B as an accommodation choice.

**Table 6. Number of respondents who spent 50-100 euros/daily per country and age groups**

Country	Number of respondents	Age per respondents	Amount Spent In Euros/Daily
1.USA	15	16-25 (3) 26-35 (4) 36-45 (3) 46-55 (2) 55-65 (2) +65 (1)	50-100
2.Croatia	12	16-25 (8) 26-35 (2) 36-45 (2)	50-100
3.Spain	10	26-35 (6) 36-45 (2) 46-55 (2)	50-100
4.Poland	9	26-35 (4) 36-45 (3) 46-55 (2)	50-100

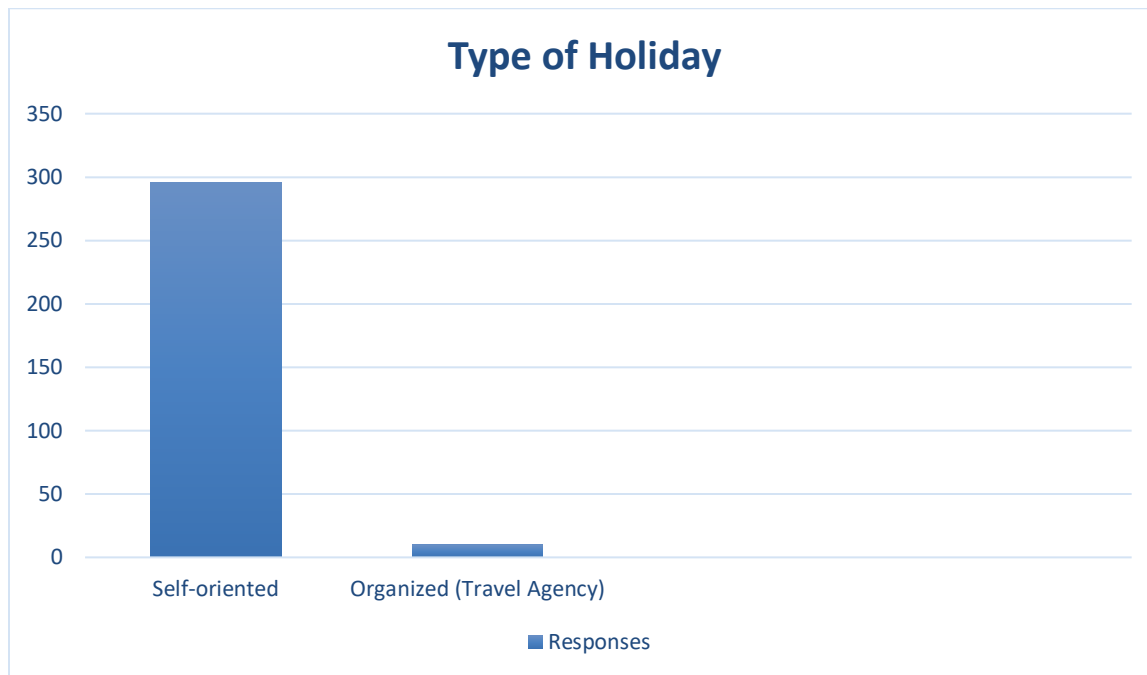
**Table 6** represents 29% or 87 respondents who spent between 50-100 euros daily in Dubrovnik during their stay. From the mentioned table we can see that visitors who have purchasing power between 50-100 euros daily are coming from the top 4 countries such as the USA, Croatia, Spain, Poland. The rest of the country ranking can be found in the appendix under (Table 6). Furthermore, visitors are also categorized based on the age group to which they belong. In the top five mentioned countries the most represented age group is 26-35 years old. Differentiation can be seen in Croatia visitors who have the most visitors spending 50-100 euros daily in 16-25 years old age group.

**Table 7. Number of respondents who spent +100 euros/daily per country and age groups**

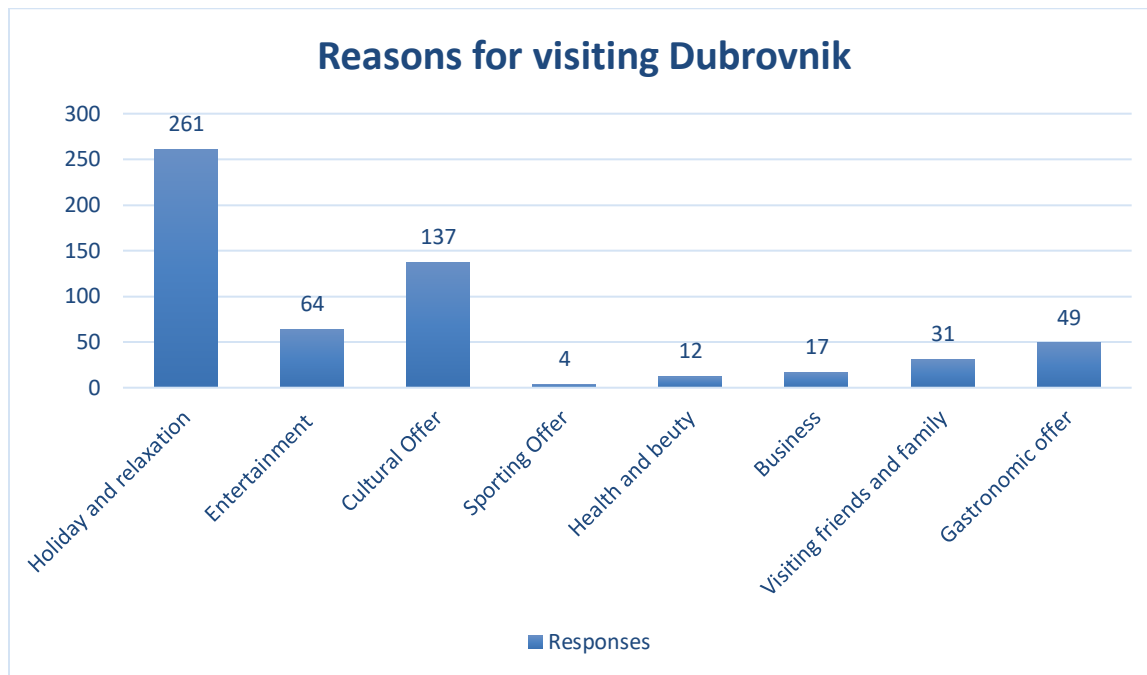
Country	Number of respondents	Age per respondents	Amount Spent In Euros/Daily
1.USA	12	36-45 (4) 46-55 (1) 55-65 (3) +65 (4)	+100
2. Poland	7	26-35 (4) 36-45 (3)	+100
3.UK	5	26-35 (1) 46-55 (4)	+100
4. Spain	2	46-55 (1) 55-65 (1)	+100
4. Belgium	2	55-65 (2)	+100
5. France	2	55-65 (2)	+100
5. Norway	1	36-45 (1)	+100
5. Canada	1	46-55 (1)	+100
5. Croatia	1	16-25 (1)	+100

**Table 7** represents 11% of visitors who spent more than 100 euros daily in Dubrovnik during their stay. Most of the visitors are coming from countries that have been ranked in the top 5 positions as illustrated in table 7, the rest of the country ranking can be found in the appendix (Table 7). The countries with the highest purchasing power are the USA, Poland, and the UK. Based on the provided data we can see that visitors are in age groups from 36-45 years old. There is a clear difference between the USA and Poland visitors and the rest of the countries. In other countries, we can see that visitors who are spending more than 100 euros daily are coming from 46-55 and 55-65 years old age groups.

**Chart 5. Type of Holiday**



**Chart 5** represents the type of holiday which visitors choose before coming to Dubrovnik. As we can see below 96.73% of visitors organized their trips on their own and only 3.27% used travel agents and arrived in Dubrovnik based on already constructed antennary. This means that tourists are considering self-oriented holidays more attractive (Stein,2012). Freedom is one of the aspects which is related to self-constructed vacation. Visitors don't like to be obligated or forced to follow timelines while being on vacation (Stein,2012). Today more and more tourists are spontaneous and they based decisions on the spot rather than going to the agencies and giving a certain percentage to do the job of planning vacation instead of initial traveler.

**Chart 6. Reasons for visiting Dubrovnik**

**Chart 6** represents the reasons for visiting Dubrovnik. 85.29% of visitors are coming to Dubrovnik for holiday and relaxation. 44.77% find the cultural offer of Dubrovnik as the reason for their travel and 20.92% are traveling for entertainment. The fourth category is a gastronomic offer that Dubrovnik has to offer. Lower performing categories are business, health and beauty, sport, and visiting friends and family. Still, Dubrovnik is being most recognized as the destination which offers a combination of three main factors sea, sun, and sand (Tourism Board, 2018). From the given results the researcher can also conclude that culture offerings are an important factor for positioning Dubrovnik as a wanted destination to visit. Further bellow tables number 7 and 8 are constructed based on the holiday, relaxation factor, and cultural offer as the two most mentioned reasons for visiting the city of Dubrovnik.



**Table 8. A number of respondents per country for visiting factor of “Holiday and Relaxation”.**

Country	Number of Respondents	Visiting Factor
1. the USA	36/261	Holiday and Relaxation
2.UK	34/261	Holiday and Relaxation
3.Poland	31/261	Holiday and Relaxation
4.Spain	28/261	Holiday and Relaxation
5.France	23/261	Holiday and Relaxation
6.Croatia	22/261	Holiday and Relaxation
7.Ireland	10/261	Holiday and Relaxation
8.Sweden	9/261	Holiday and Relaxation
8.Austria	9/261	Holiday and Relaxation
9.Germany	8/261	Holiday and Relaxation
10.Belgium	7/261	Holiday and Relaxation

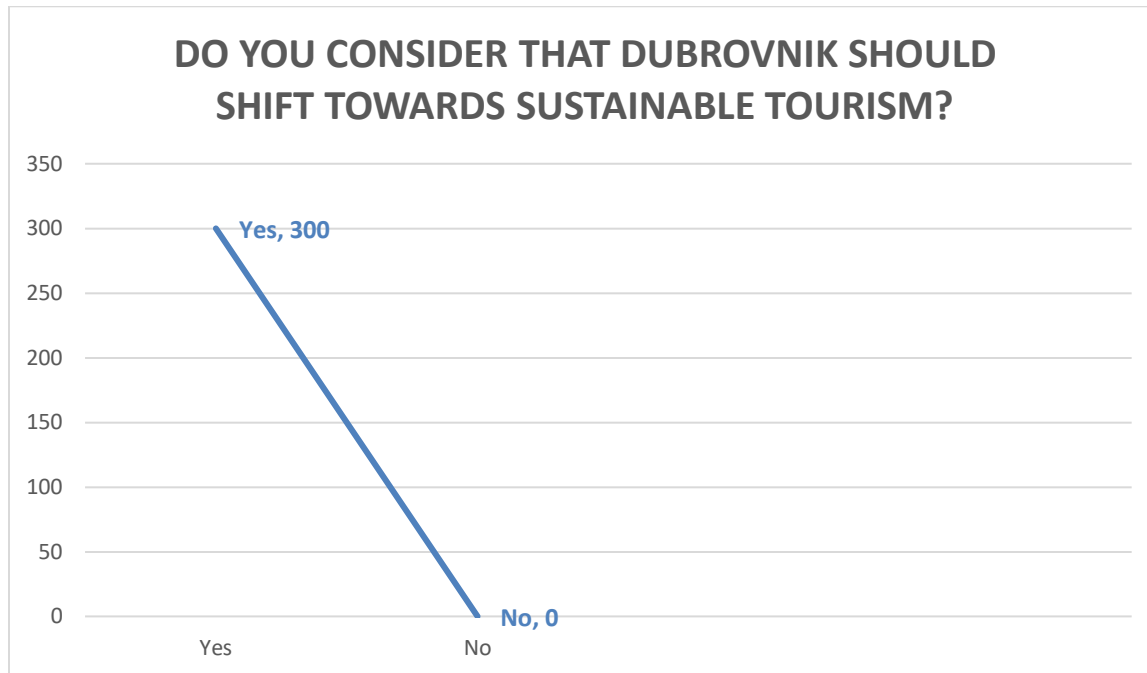
**Table 8** represents the top 10 countries based on visitor choice of holiday and relaxation factor for choosing Dubrovnik as the tourism destination. The further country ranking can be found in the appendix under (Table 8). The first six countries USA, UK, Poland, Spain, France, and Croatia have the most respondents who considered Dubrovnik as the primary destination for relaxation purposes.

**Table 9. A number of respondents per country for visiting factor of “Cultural Offer”.**

Country	Number of Respondents	Visiting Factor
1. the USA	25/137	Cultural Offer
2.UK	16/137	Cultural Offer
3.Spain	14/137	Cultural Offer
4.Croatia	12/137	Cultural Offer
5.France	11/137	Cultural Offer
6.Australia	9/137	Cultural Offer
7.Poland	8/137	Cultural Offer
8.Germany	7/137	Cultural Offer
9.Canada	6/137	Cultural Offer
10.Austria	5/137	Cultural Offer

**Table 9** represents visitors who choose “Culture offer” as the primary reason for visiting Dubrovnik. The top 5 countries are the USA, UK, Spain, Croatia, and France holding the most respondents who are driven by the cultural offer as a deciding factor for coming to Dubrovnik. The rest of the country ranking is illustrated in Table 9 under the appendix section.

**Chart 7. Should Dubrovnik shift towards a sustainable tourism model**



**Chart 7** shows how all 300 visitor respondents answered that they consider how Dubrovnik should shift towards a sustainable tourism model. Sustainable tourism should be an option for people who are interested in sustainable accommodation and travel options. The greater importance lays in local resources, natural areas, and cultural heritage. As mentioned previously price is the deciding factor that will control sustainable purchases.

With the Sustainable tourism model, the main benefit for the city of Dubrovnik is reducing the number of visitors in one place to keep the UNSECO title. If people are equally distributed throughout Dubrovnik and near locations, there will be a significant decrease in pollution, food waste and the authentic look of the city will be protected (Mihalić, 2010). Nature resources and the local community would feel less pressure during the summer season if the sustainable offer is being employed. Local infrastructure can be improved by encouraging visitors to walk around the city and not drive around. Prolonging tourism season can help in the

preservation of cultural sites, improvement of local offerings, and keep competing with similar destinations. Increasing local culture and providing local feelings to visitors through sustainable offers Dubrovnik can balance the quality-price ratio.

#### **6.4. The satisfaction of Locals in Dubrovnik**

Question 9 in the local survey “Dubrovnik vision 2030” was constructed in a way to test the opinions of locals regarding tourism and the effects which tourism might have on the Dubrovnik population. 65.9% of local respondents feel intruded on tourism in the city of Dubrovnik. 50% of respondents consider that the quality of life went down because of tourism. But almost all of the respondents think that tourism is a strong economic driver in Dubrovnik with 96.02%. Also, 83.78% of local citizens think that the standard of living in Dubrovnik is higher due to the constant income from tourism seasons.

From these opinions, we can see how tourism is important in Dubrovnik from the economic aspects. 75.5% of locals consider how tourism has had negative impacts on nature and the cultural environment in Dubrovnik. An enormous amount of visitors at the same time in the location have a significant impact on the environment based on waste production, pollution, and space consumption as well. One of the biggest dilemmas is to produce a tourism model that can last for the entire year in Dubrovnik as a tourism destination. During the summer offer is based on sun, sea, and sand. Which positioning is not acceptable from the locals and 69.21% consider how Dubrovnik's positioning needs revising in a sense of promoting different aspects of tourism such as alternative and sustainable tourism.

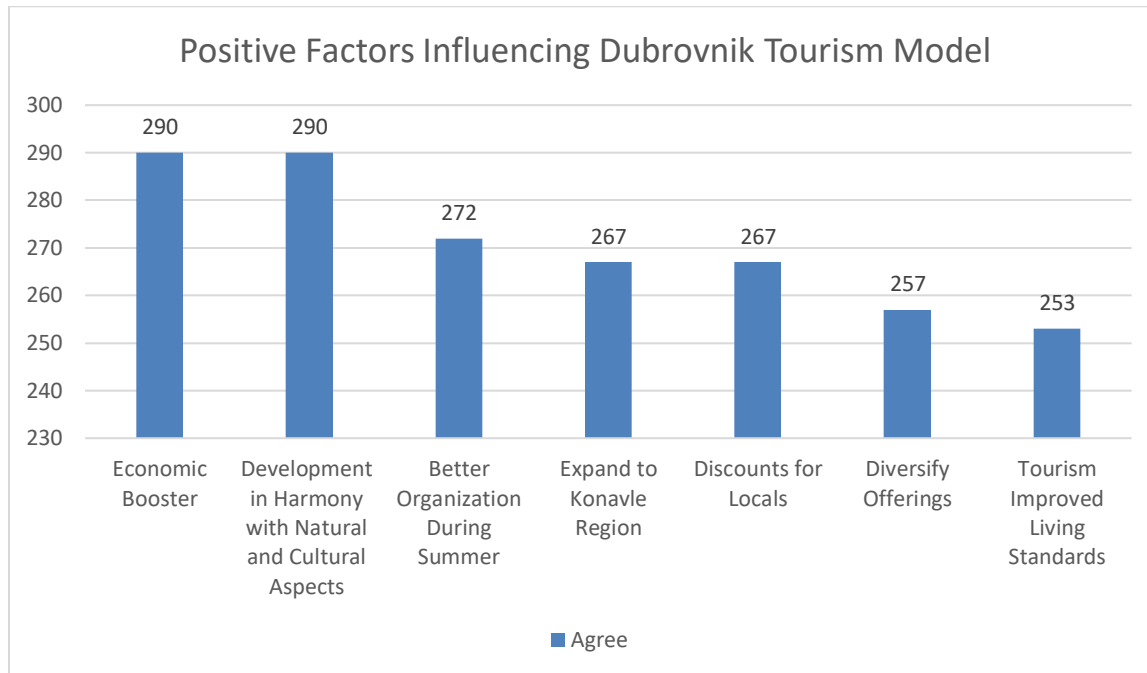
During the winter period, Dubrovnik becomes one of the Christmas stages offering locally produced goods and services. 69.21% of local respondents agree with the statement that

Dubrovnik should employ all year tourism model. As the researcher stated in the literature review section that Dubrovnik is one of the well-known cruise ship destinations as well.

The biggest problem which had an impact on the resident perception of tourism is related to crowded spaces that cruise ship visitors are producing. 75.17% of respondents consider that Dubrovnik should not increase the number of cruises during the summer season. And 77.15% of residents consider how the existing number of cruise ship visits should be further decreased. 60.6% of respondents are not satisfied with the current infrastructure in the city of Dubrovnik.

This leads to a percentage of 69.84% locals not being satisfied with the parking prices and only 33.77% being satisfied with public transportation offers. 85.1% of locals consider that Dubrovnik should diversify its offer and allocate usage of existing resources which the city of Dubrovnik has to offer. 88.41% of respondents consider expanding tourism offers and sustainability models to the Konavle region. Production of local, authentic experiences through alternative, engaging, sustainable, and eco-tourism models. 90.07% consider that Dubrovnik needs better organization during the summer season to improve quality of life.

**Chart 8 Positive factors influencing Dubrovnik Tourism Model from Local Perspective**



**Chart 8** represents the top 7 factors influencing Dubrovnik Tourism Model from a local perspective. Table 10 in the Appendix is supporting all 20 factors and visitor opinions about the factors by the importance of influencing the sustainable tourism model.

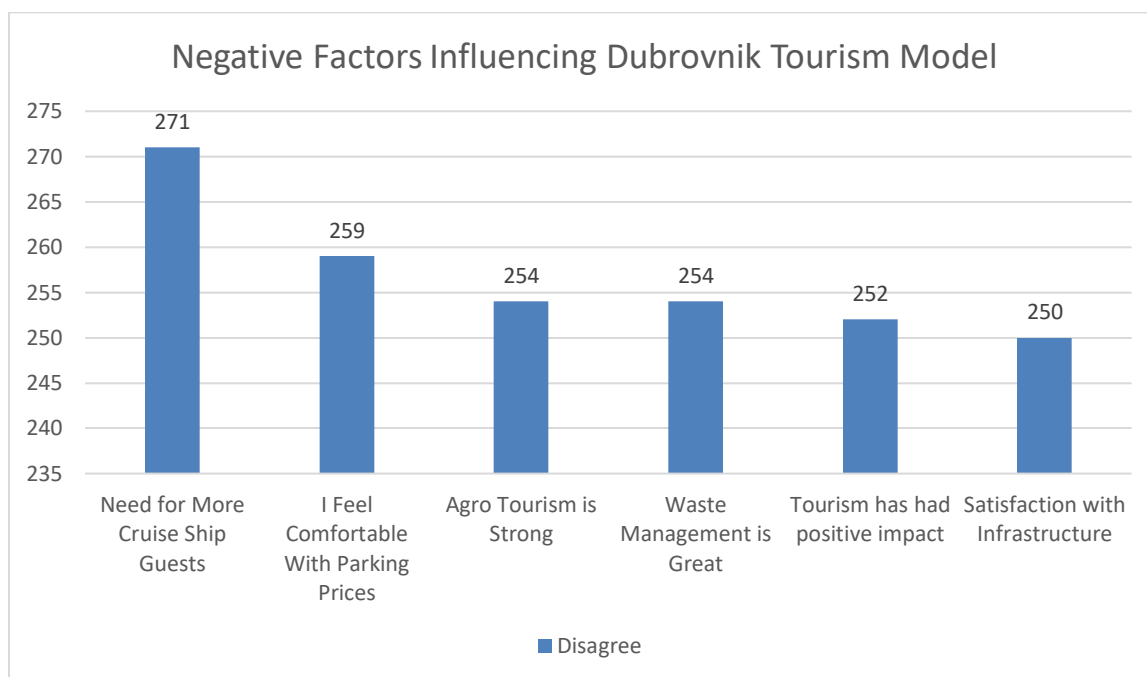
Implementation of a sustainable tourism model will yield benefits for locals by boosting revenue and preserving the natural environment as well. From a local perspective, the researcher can see how tourism, in general, is being perceived as a strong economic booster but at the same time, locals do care about tourism being developed in harmony with natural and cultural aspects.

A sustainable tourism model will bring additional service offerings that can help in the allocation of visitors throughout the location. Agro-culture and alternative tourism with sustainable effects can be expanded to the Konavle region. Which desire locals are showing by

considering that the Konavle region can be used for alternative and eco-tourism offerings. Prices should be designed to satisfying demand and supply in Dubrovnik.

The researcher provided tables with spending information regarding each visitor age group. Discounts for locals are desired by local respondents and with sustainable offers in place and pricing strategies local needs should be satisfied as well. Most of the local respondents consider how tourism generally improved living standards in Dubrovnik. By having a Sustainable tourism model standard of living in Dubrovnik can be increased not just from a monetary aspect.

**Chart 9 Negative factors influencing Dubrovnik Tourism Model from Local Perspective**



**Chart 9** represents the negative factors that tourism had on Dubrovnik based on local respondents' opinions. The number one factor with which local respondents don't agree is that Dubrovnik needs more cruise ship guests. With a sustainable tourism model, guests will be

expected to spend more than one or two days in Dubrovnik. By reducing the number of guests coming from cruise ships quality of visitors' stay and local everyday life will be increased.

Waste management is another factor which is representing a huge threat based on resident opinions. With the Sustainable model waste management products can be regulated and disposal operations can be enhanced. Locals also consider that tourism, in general, has had negative impacts on the natural environment due to a large number of visitors arising and without any positive developments in City infrastructure which can accommodate many visitors rising. According to the [urbanwaste.com](http://urbanwaste.com) website waste management in Dubrovnik-Neretva County has to be managed by Croatian Government policies. From 2008 to 2015 sustainability waste management acts have been employed by separating waste by 10-15% such as a separate collection of paper and plastic. A major problem in the Dubrovnik-Neretva county is related to illegal landfills with construction and bulky waste. Dubrovnik-Neretva County is one of the counties with the highest number of active landfills. On a total of 1780,86 km<sup>2</sup> land area, there is a total of 10 landfills (Urban Waste, 2017).

Due to the increased number of tourists visiting Dubrovnik in the summer season, there is significant environmental pressure on air, land, and sea. In some areas such as the Dubrovnik Old City, the municipal waste amount increases from 50% up to 400% (Urban Waste, 2017). Urban Waste nonprofit organization is supporting policymakers in developing adequate strategies for future waste management in Dubrovnik-Neretva county as a whole.



## **6.5. The satisfaction of Tourists coming to Dubrovnik**

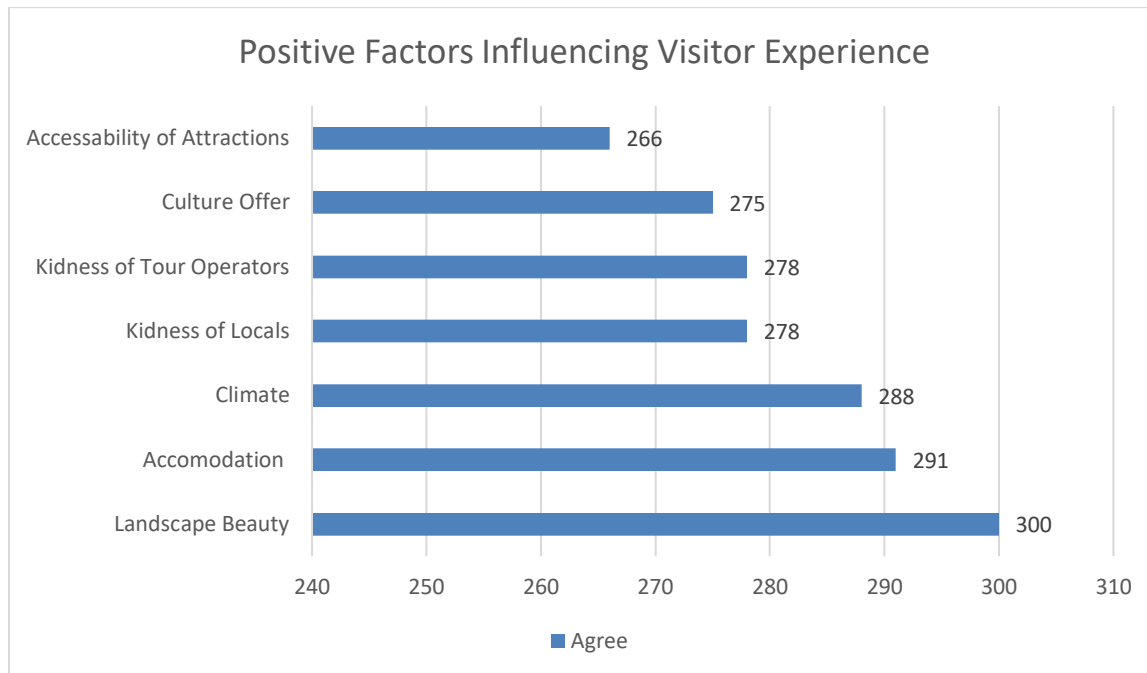
After questioning 300 visitors these sentiments mirror statements from locals, where the researcher was able to discover how locals and tourists have the same opinions about the implementation and benefits of Sustainable tourism in the city of Dubrovnik. 98.69% claimed that Sustainable tourism is important and it should be the standard of travel. 75.16% of respondents are finding nature preservation as the key benefit of sustainable tourism. 62.09% placing culture and culture heritage as second aspect following with ecotourism 46.73% and environment protection with 35.95%. Providing insights on how tourists are coming to the destination the largest number 72.22% arrived by plane. That means that alternative solutions for moving around the location are needed. The second most common mode of transportation selected was a personal vehicle with 20.59% of respondents.

This year only 0.98% of visitors arrived in Dubrovnik by cruise ship which is an unusual number compared to previous years in the tourism season. This number can be justified with the COVID-19 virus which had a huge impact on the cruising industry. Upon arrival at the destination, 66.67% of visitors used their vehicle as a daily mode of transportation. 19.61% decided to walk around the city and 11.76% used public transportation as their transportation choice.

Survey participants were asked if they are looking for sustainable tourism offers and if yes why they consider them beneficial for their travel experience. 78.43% of respondents are looking for sustainable offers, tours, and accommodation while traveling to the destination. 19.61% stated that they don't look for sustainable offers, tours, and accommodation but that doesn't mean that they are not finding sustainable tourism as important. To find out if tourists

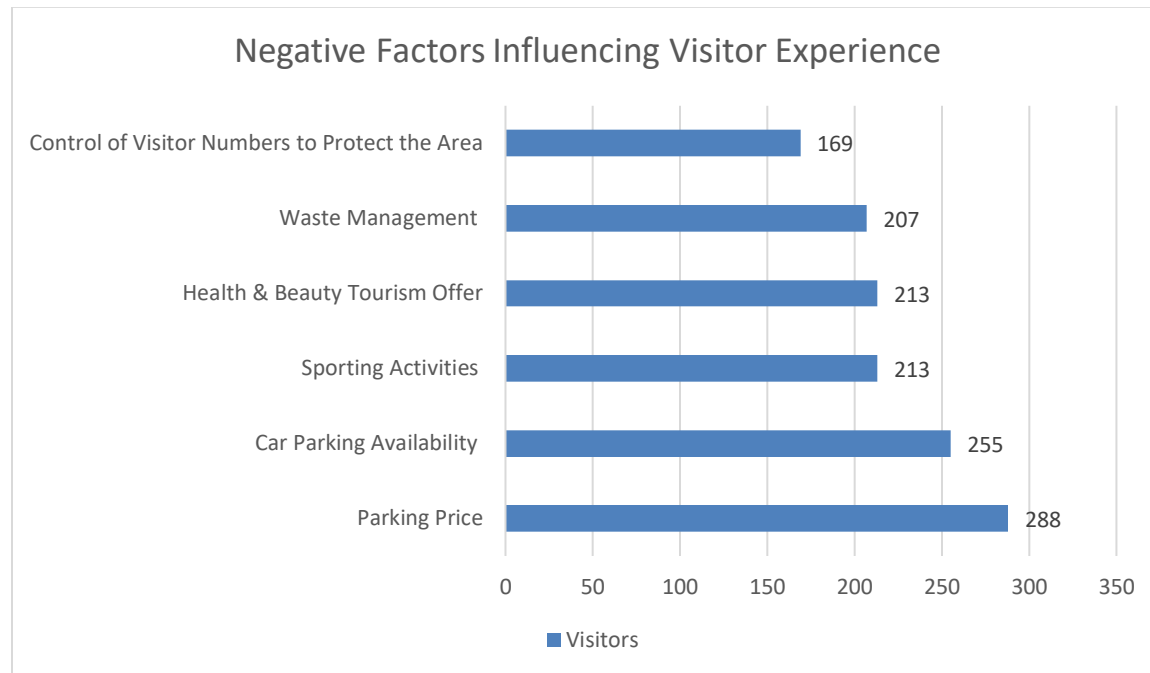
who are visiting Dubrovnik are willing to pay more for sustainable tourism 93.96% stated yes but they think that the costs should be taken into consideration before the final decision.

**Chart 10. Positive factors influencing Dubrovnik Tourism Model from Visitor Perspective**



**Chart 10** represents factors that had a positive influence on visitors during their stay in Dubrovnik during summer season 2020. Factors such as Landscape beauty were ranked high with 300 respondent votes. The accommodation was ranked with 291 votes for satisfaction and Climate with 288 out of 300 respondent votes. The kindness of local and tour operators have the same number of votes 278 out of 300. Following with Culture offer and Accessibility of attractions. Tourists are satisfied with the ability to visit the places around Dubrovnik quickly by 78.76%. The culture offers seems to show the biggest expectation among visitors with a 90.17% anticipation rate. 69% of visitors consider that waste management is not set right in Dubrovnik during their stays throughout summer season 2020.

**Chart 11 Negative factors influencing Dubrovnik Tourism Model from Visitor/Local Perspective**



**Chart 11** represents factors that had a negative influence on visitors during their stay in Dubrovnik. 288 out of 300 tourists are very dissatisfied with parking prices in Dubrovnik. Following with 255 out of 300 considering that car parking availability is poor in Dubrovnik. Versus Sports Activities where 213 out of 300 tourists were dissatisfied with a lack of offered services. Following with Health and Beauty tourism which is not being represented considered 213 out of 300 visitors.

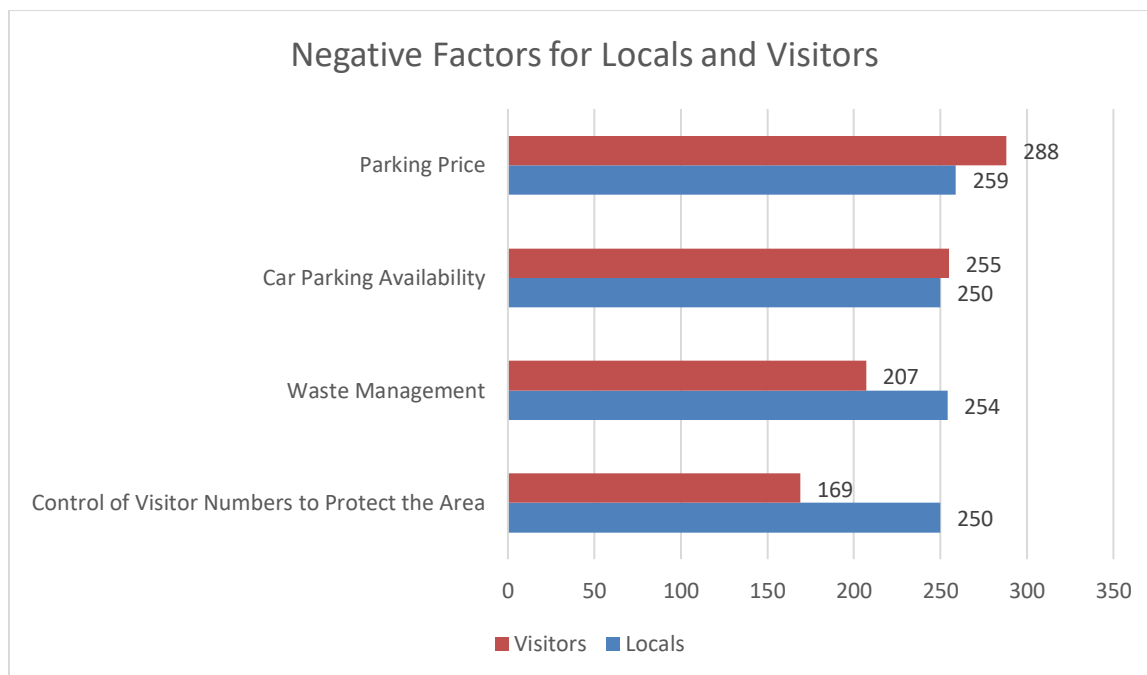
After questioning 300 visitors about their Dubrovnik experiences the researcher came up with the following data. 94.11% of respondents loved the climate which Dubrovnik has to offer. 90.85% consider the local population to be kind and ready to assist either through tourism offer or with providing useful information. As previously mentioned the biggest number of tourists used their personal or rent a car vehicle to move around location. Only 58.83% consider road

infrastructure as satisfying. 14.76% expressed satisfaction with parking availability. 93.79% of respondents who visited Dubrovnik during the 2020 season stated that they will visit the city of Dubrovnik again shortly and only 6.2% stated that they will not come back to Dubrovnik.

## 6.6. Locals and Tourists

After closely examining collected survey data the researcher was able to draw a significant connection between the negative factors which are influencing both visitors coming to Dubrovnik destination and locals who are living in Dubrovnik. Factors showed in chart 12 can be seen as factors on which visitors and locals are agreeing upon. With this meaning, the city of Dubrovnik can take listed factors as objectives for enhancement and further development to change negative perceptions between visitors and locals.

**Chart 12 Negative factors influencing Dubrovnik Tourism Model from Local and Visitor Perspective**



### **6.6.1. Parking Price**

For locals and visitors, the number one negative aspect of having massive tourism in the city of Dubrovnik is parking prices. 288 out of 300 visitors are showing dissatisfaction with parking prices during their stay in Dubrovnik during summer season 2020. 259 out of 300 locals are also being dissatisfied with parking prices which are being doubled during the summer season.

### **6.6.2. Car Parking Availability**

For locals and visitors, the second negative aspect of having massive tourism is car parking availability. 250 locals and 255 visitors out of 300 respondents are expressing negative concerns about having enough parking spaces to support several visitors and locals' needs during the summer season.

### **6.6.3. Waste Management**

Waste management in this study is referring to the production of waste which is increasing during the summer season. Regulations are being followed for disposing of the waste with proper care for the natural habitat and well-being of the community. 254 out of 300 locals are showing concerns about waste management in Dubrovnik. Following with 207 out of 300 visitors showing the same concern based on waste produced during their stay in the location.

#### **6.6.4. Control of the Visitor Numbers to Protect the Area**

Controlling the number of visitors and locals during the summer season is important to avoid massive crowds which are influencing the quality of life for locals and the level of service quality for visitors. 250 out of 300 locals consider that control of visitors during the summer season is not managed well. 169 out of 300 visitors expressed negative impressions of having crowded spaces is influencing their experience during the stay in Dubrovnik.

## **7. Limitations to the Study**

Although this research provided insights into the economic benefits of shifting from massive to sustainable tourism there are limitations to this study as well. First due to the restricted time which researchers had data coming from tourists collected may vary due to tourist profile visiting Dubrovnik in the research period. Due to the COVID-19 pandemic impact on resources and tourism season the researcher was not able to get responses from Dubrovnik city officials. Area for additional exploration of Sustainable tourism impact on the city of Dubrovnik can be done by acquiring more data from Dubrovnik officials and Dubrovnik Tourism Board. Dubrovnik as a tourist destination is already being impacted by less tourism business due to the COVID-19 virus. Which caused all cruise ships to be canceled for the summer season of 2020 a meaning that fewer data will be collected from tourists coming to Dubrovnik from cruise ships and in the end perception of local businesses may be different compared to the previous years.

## **8. Recommendations**

### **8.1. Infrastructure**

One of the main key points is the infrastructure of the city of Dubrovnik. Reforming existing infrastructure to accommodate the needs of visitors and locals during and off the season period. Roads have to be repaired, traffic should be regulated better and new laws should be implemented. One of the possible starting points can be the installation of traffic counters. Which will be installed at the entrance to Dubrovnik and to the places which are the most crowded by car traffic. Such as Port of Gruž, main bus terminals, and the vicinity of Old City. Traffic counters can help with reducing the number of vehicles on the roads during peak hours. The existing public garage at the entrance to Dubrovnik can be used as a hub and spoke system.

### **8.2. Space Allocation**

Both visitors and locals stated that they are highly unsatisfied with the availability and price of the parking prices. The first price of the hourly parking should be reduced from almost six euros to 2-3 euros. To use the full capacity of four ground floors of parking places traffic jams might be reduced significantly. From a public garage, sustainable offers might be offered such as bikes, scooters, or car-sharing options. Public transportation should be divided between tourists and locals. Visitors and locals should be encouraged to implement a sharing economy where multiple benefits can be yield. Such as less pollution, less traffic, and faster flow through destination can be achieved.



### **8.3. Crowd Management**

One of the main pain points for residents is a distraction that is being made during the summer season by overcrowded spaces. Employing all-year-round tourism should be balanced with the number of visitors coming to the destination. One of the solutions is the implementation of reservation systems for visiting the Old City. In this way, the City of Dubrovnik and the Tourism Board can be in control of how many people are in certain parts of Dubrovnik. The infrastructure of the city is another pain point that is in common for visitors and locals.

### **8.4. Waste Management**

75.50% of residents consider that tourism harmed nature and the environment. One of the solutions is better waste management systems. Waste management policies should be updated. During the summer season, more companies should be involved in processes of properly dissolving waste management. There is a huge need for education and an understanding of how unprofessional waste management can destroy natural resources in Dubrovnik.

One of the first steps should be the implementation of garbage recycling which each household should obey. Implementation of alternative, eco-tourism, and agro-tourism can be done through expanding Dubrovnik's offer on the Konavle region and nearby islands where tourists will get a chance to engage in co-creation tourism through learning aspects. As 69.21% of locals are considering that Dubrovnik needs to move from sea, sun, and sand to engaging, education, and co-creation to start with a sustainability model. 90.07% of locals consider that better organization is needed for the city of Dubrovnik.

Quality and creation of experiences are the key elements that the Dubrovnik Tourism Board should take seriously as 61.11% of visitors who visited Dubrovnik during summer season 2020 arrived in Dubrovnik based on recommendations from friends and family.

### **8.5. Offerings Management**

Another aspect of enhancing visitor satisfaction can be done with better organization of events and amusement offers in Dubrovnik. To expand tourism, offer in the city of Dubrovnik the researcher proposes based on collected data that attractions in the proximity of 20 kilometers from Dubrovnik can help in boosting supportive tourism offer. 28.62% of the visitors are satisfied with existing sporting activities. Opening new sports facilities in the Konavle region where sustainability can be promoted through a combination of health-sport and nature tourism. Health and beauty offers can be enhanced by providing relaxation and spa zones through nearby islands. Where tours such as “relax-travel” can be marketed to visitors coming to Dubrovnik. Culture and History are being placed as the second most important aspect of sustainable tourism preservation with 62.09%. Providing learning excursions offseason to students and history experts can be another enhancement to attract more visitors during the offseason.

### **8.6. COVID-19 Positive Impact**

Summer season 2020 was an exception to the COVID-19 situation. Having tourism season without cruise ships was beneficial for all of the guests who stayed in Dubrovnik. 78.76% of visitors stated that they are extremely satisfied with moving around the location and visiting all attractions without crowds. Having equally distributed people around Konavle, Islands, and Dubrovnik itself can help. Improved targeting and selection of visitors is another key point to

attract more visitors and keep a sustainable aspect to it. Having lower numbers of visitors to the destination doesn't mean that there is less profit made.

### **8.7. Marketing Efforts**

The research partly discovered how much money do the visitors spend and how many days do they stay in the location. On average 45.60% of visitors stayed 3 days but we can see a significant increase of 32.90% staying between 4 to 7 days. 55% of visitors spent 30 to 50 euros daily and 29% spent in the range from 50 to 100 euros. Dubrovnik Tourist Board is considered the main destination management service provider. But as seen from the gathered data 0% of visitors were influenced by Dubrovnik Tourism Board. The proposed solution is to find out where is the communication problem between the Tourism Board and visitors. The development of main sustainable initiatives should be done by the Dubrovnik Tourist Board and used as a marketing channel to convey the desired message to visitors who are coming to Dubrovnik.

### **8.8. Next Steps in the Research**

The next step in the research process should be the connection between days stayed and money spent. How Dubrovnik should increase the number of stays and if there is a connection between night stays and cruise ship coming to destination and making it overcrowded. Change from Massive to Sustainable tourism is not easy but the researcher considers that the summer season of 2020 can be the turning point for Dubrovnik and its tourism to finally starts with the implementation of the measures or even implementing few listed recommendations for a better future and "Dubrovnik tourism-2030" model.

## **9. Summary**

An increase in Mass tourism is one of the biggest problems which the City of Dubrovnik is trying to overcome. Its growing importance is primarily associated with local residence quality of life during the summer season. This study proposes the implementation of sustainable tourism on the example of the City of Dubrovnik to measure if sustainable tourism will increase satisfaction among locals and tourists during the entire year versus high season and overcrowded space. The survey was distributed among key stakeholders in the City of Dubrovnik during the summer season to gather as much as possible information for a better understanding of participants' wants, needs, and understandings regarding the implication of the sustainable tourism model. Results were analyzed by descriptive and inferential statistics. Most of the local respondents consider how tourism generally improved living standards in Dubrovnik. By having a Sustainable tourism model standard of living in Dubrovnik can be increased not just from a monetary aspect.

### **Yes, to Sustainability and No to Mass Tourism**

Implementation of a sustainable tourism model will yield benefits for locals by boosting revenue and preserving the natural environment. From a local perspective, the researcher can see how tourism, in general, is being perceived as a strong economic booster but at the same time, locals do care about tourism being developed in harmony with natural and cultural aspects. The number one factor with which local respondents don't agree is that Dubrovnik needs more cruise ship guests. With a sustainable tourism model, guests will be expected to spend more than one or two days in Dubrovnik. By reducing the number of guests coming from cruise ships quality of visitors' stay and local everyday life will be increased as well.

98.69% of visitors claimed that Sustainable tourism is important and it should be the standard of travel. 78.43% of respondents are looking for sustainable offers, tours, and accommodation while traveling to the destination. 93.96% of visitors are willing to pay for sustainable offerings but they think that the costs should be taken into consideration before the final decision. A positive influence on visitors during their stay in Dubrovnik during summer season 2020 are factors such as Landscape beauty, the accommodation, climate, the kindness of local and tour operators. Following with Culture offer and Accessibility of attractions. Tourists are satisfied with the ability to visit the places around Dubrovnik quickly by 78.76%. The culture offers seems to show the biggest expectation among visitors with a 90.17% anticipation rate.

### **Importance of Waste Management**

Waste management is another factor which is representing a huge threat based on resident opinions. With the Sustainable model waste management procedures can be regulated and disposal operations can be enhanced. Locals also consider that tourism, in general, has had negative impacts on the natural environment due to a large number of visitors arising and without any positive developments in City infrastructure which can accommodate many visitors rising. From another perspective, visitors are also aware that proper waste management is important for the city of Dubrovnik. With sustainability model initiatives such as recycling containers and fewer plastic offerings are key in reducing the amount of waste produced in Dubrovnik during the summer season. Until 2030 Dubrovnik should commit its effort towards reducing the environmental footprint by eliminating single-use plastic within services providing offerings towards visitors coming to Dubrovnik.

## **Development of Infrastructure**

Four crucial aspects which both locals and visitors are agreeing upon our dissatisfaction with car parking prices and lack of parking space in the city of Dubrovnik during the summer season. 254 out of 300 locals are showing concerns about waste management in Dubrovnik. Following with 207 out of 300 visitors showing the same concern based on waste produced during their stay in the location. And the fourth concerning factor is control of the visitor number in the location. Controlling the number of visitors and locals during the summer season is important to avoid massive crowds which are influencing the quality of life for locals and the level of service quality for visitors. 250 out of 300 locals consider that control of visitors during the summer season is not managed well. 169 out of 300 visitors expressed negative impressions of having crowded spaces is influencing their experience during the stay in Dubrovnik.

The findings of the study are highly important for the Dubrovnik officials, Dubrovnik Tourism Board, Local Business which will be able to custom the offer which the City of Dubrovnik can offer by aligning it with the definition of sustainable tourism model. Moreover, findings can be useful for other tourism destinations that are being impacted by Mass tourism such as Split, Zadar, and other coastal cities. This understanding can help destination leaders to improve the fluctuation of offer and tourists coming to the city throughout the entire year instead of being in the destination for only a few months. If communication of given data is being spread among key destination leaders, Dubrovnik can shift its branding from Sea, Sun, and Sand to authentic, alternative, and rural experiences to provide quality tourism offer to all stakeholders.

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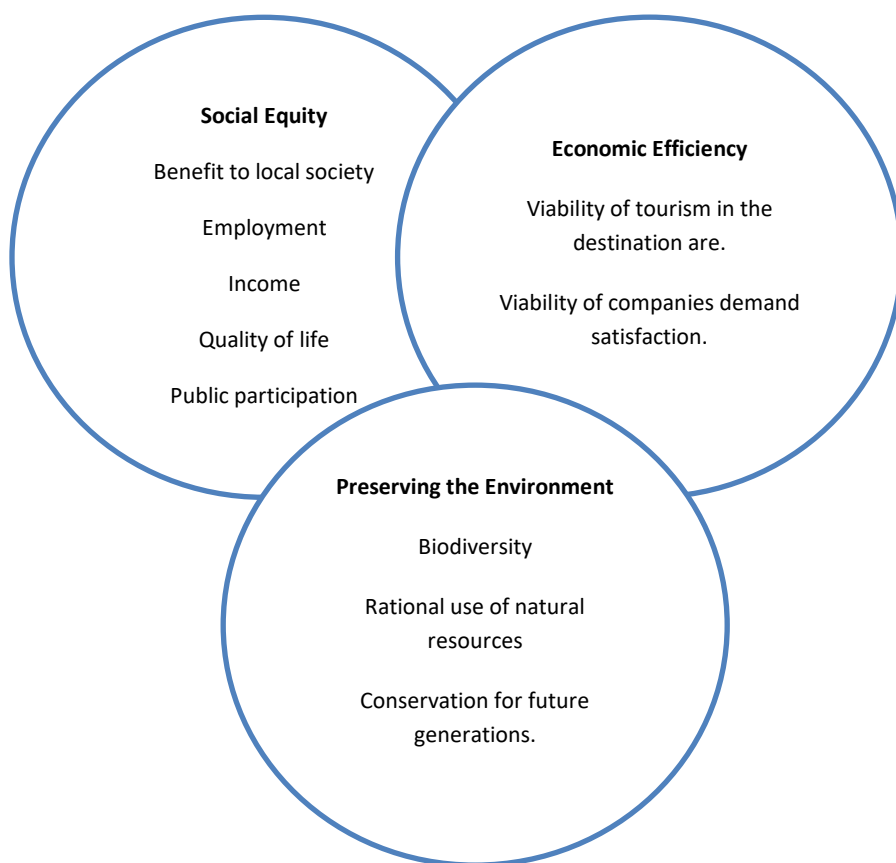
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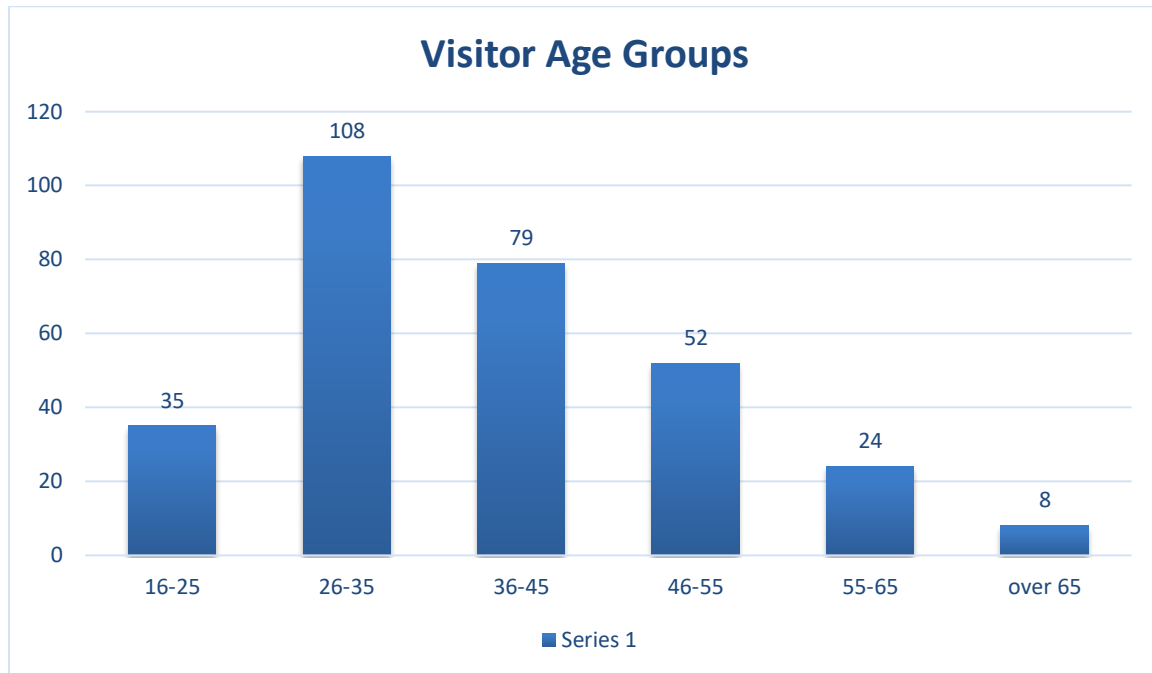
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## 11. Appendix

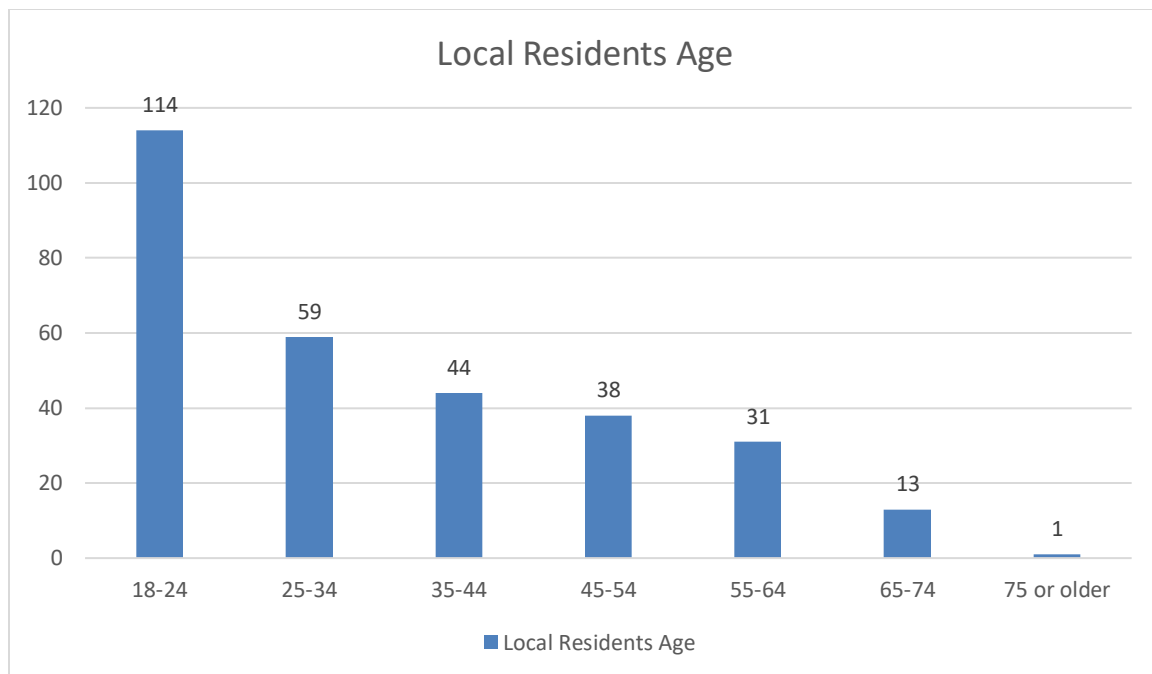
Fig. 1. Sustainable Tourism Model. Source: Drawn up from Hall (1998)



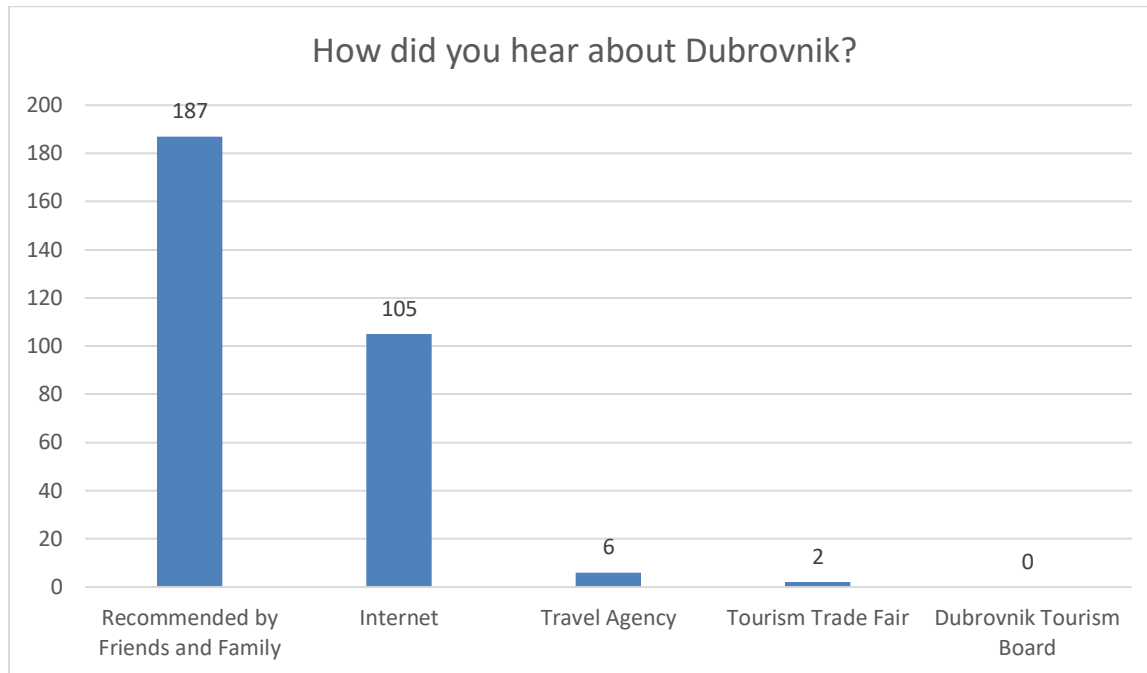
**Chart 1. Visitor Age Groups**



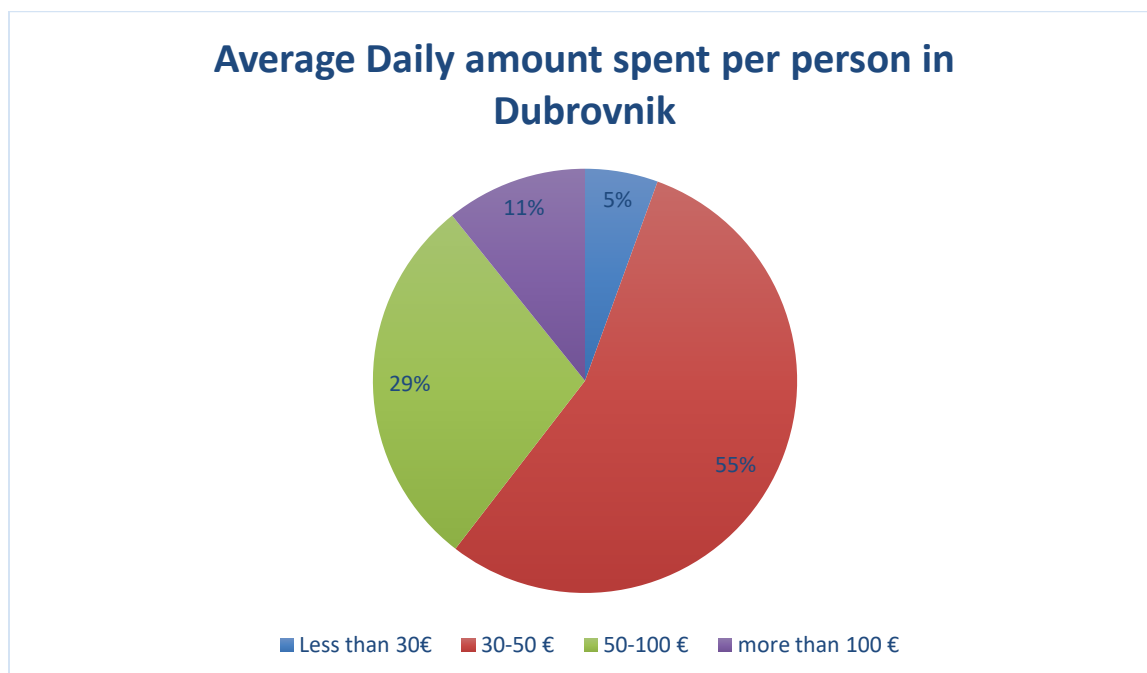
**Chart 2. Local Residents Age**



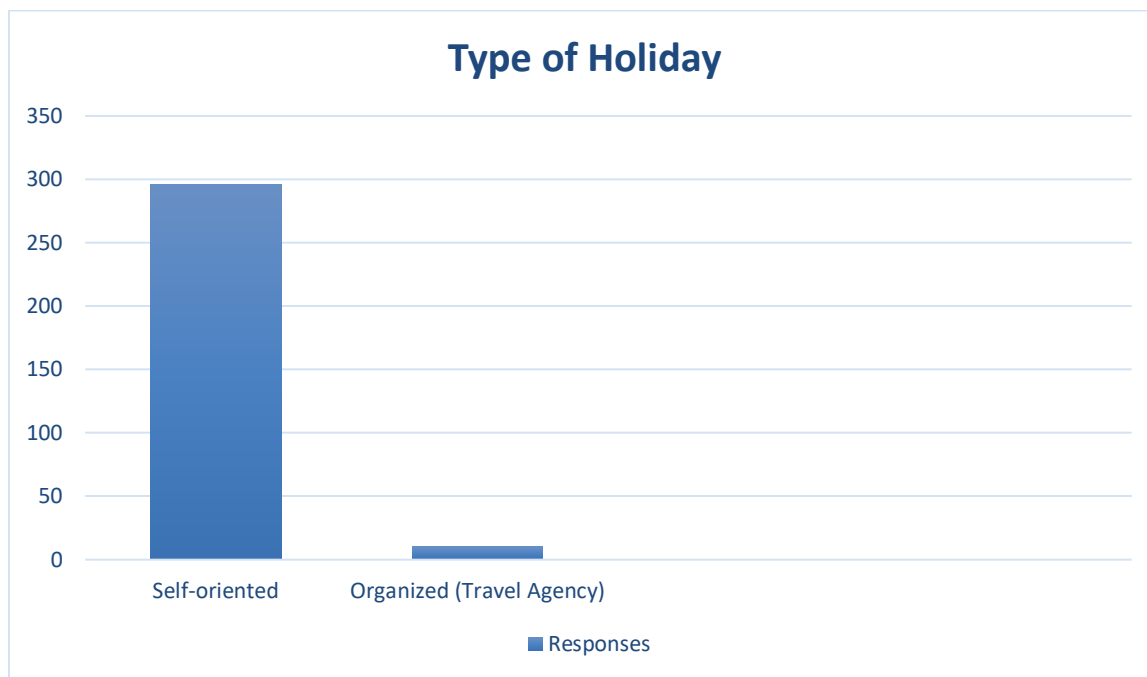
**Chart 3. Marketing Channels of Dubrovnik**



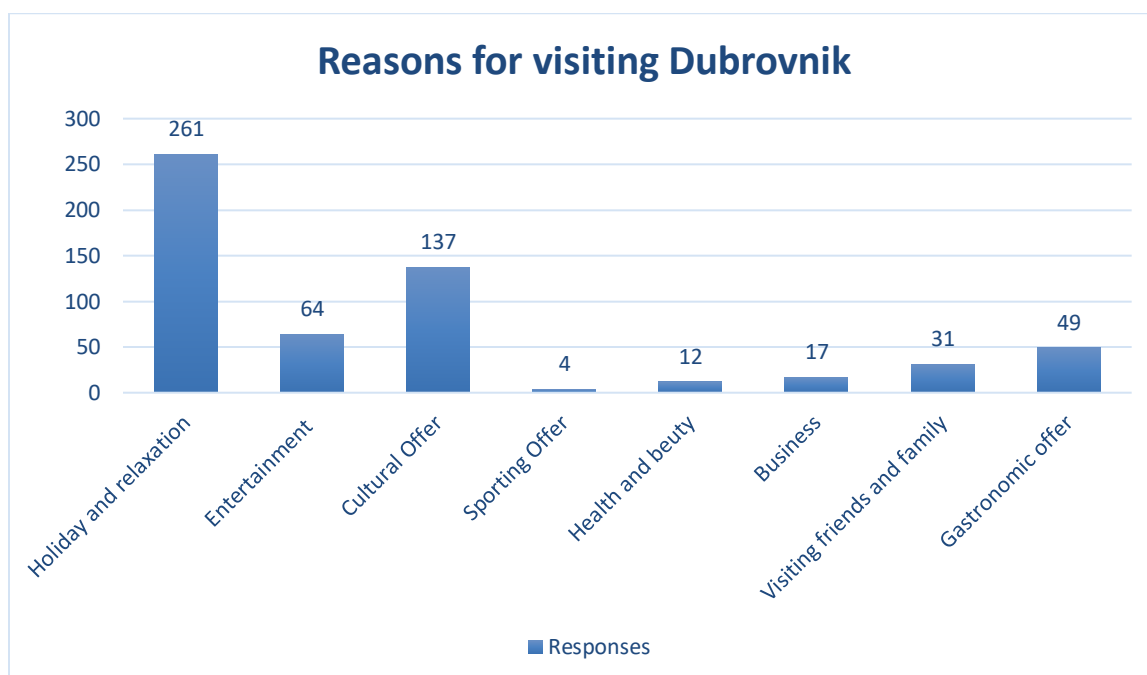
**Chart 4. Average Daily amount spent per person in Dubrovnik**



**Chart 5. Type of Holiday**

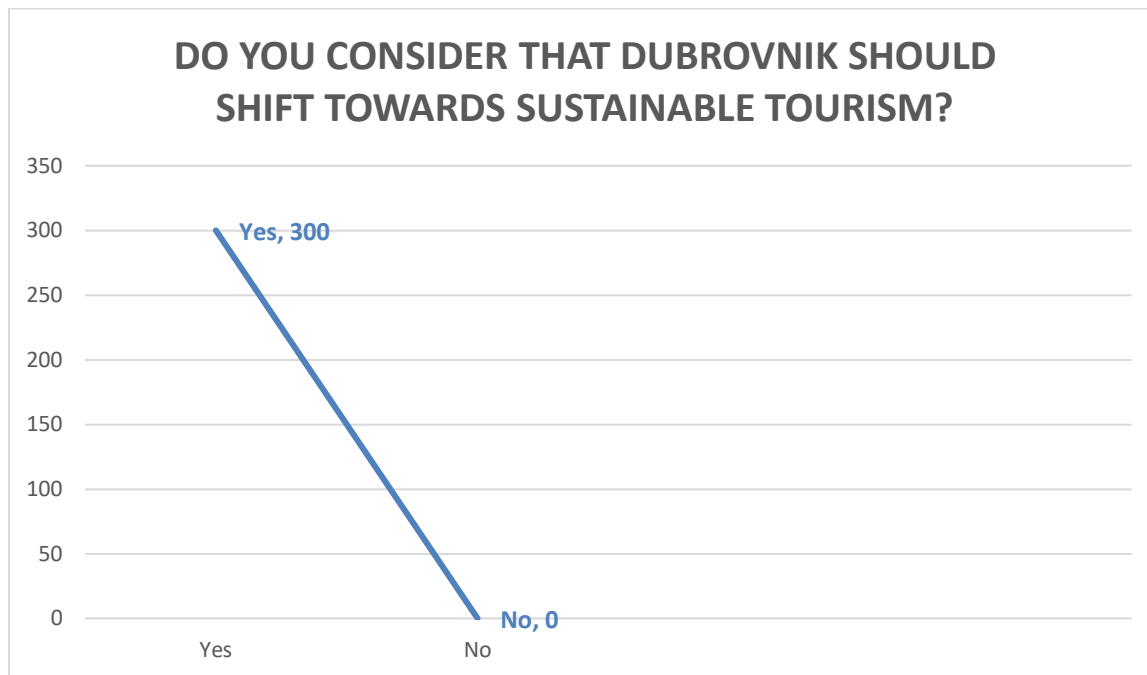


**Chart 6. Reasons for visiting Dubrovnik**

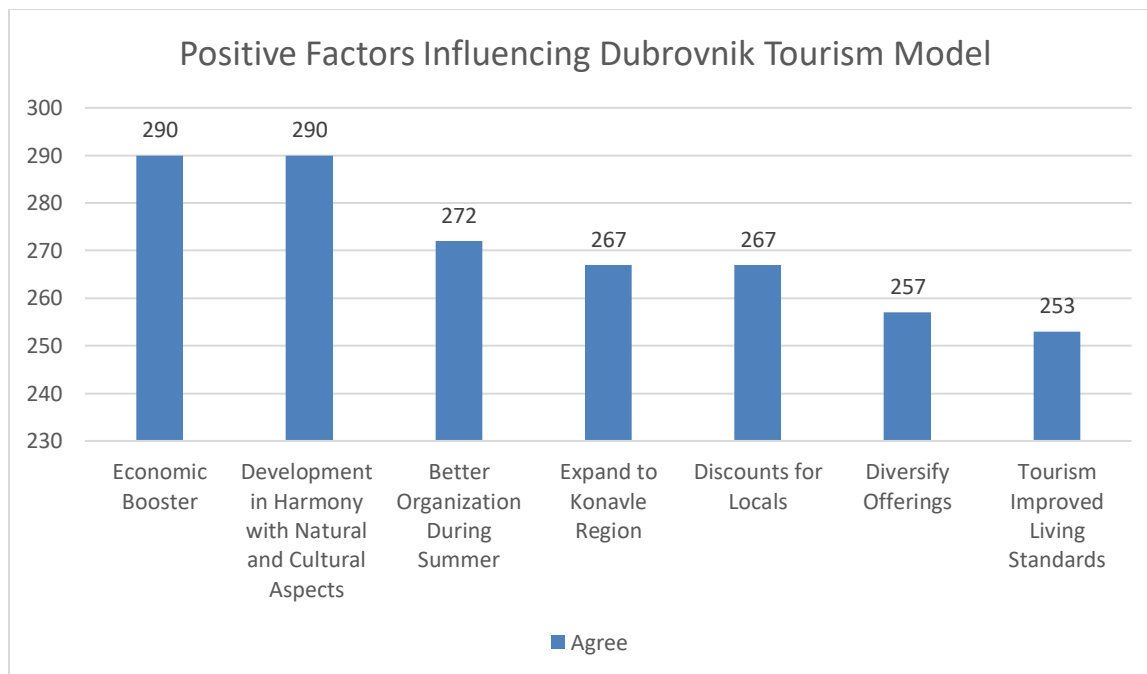




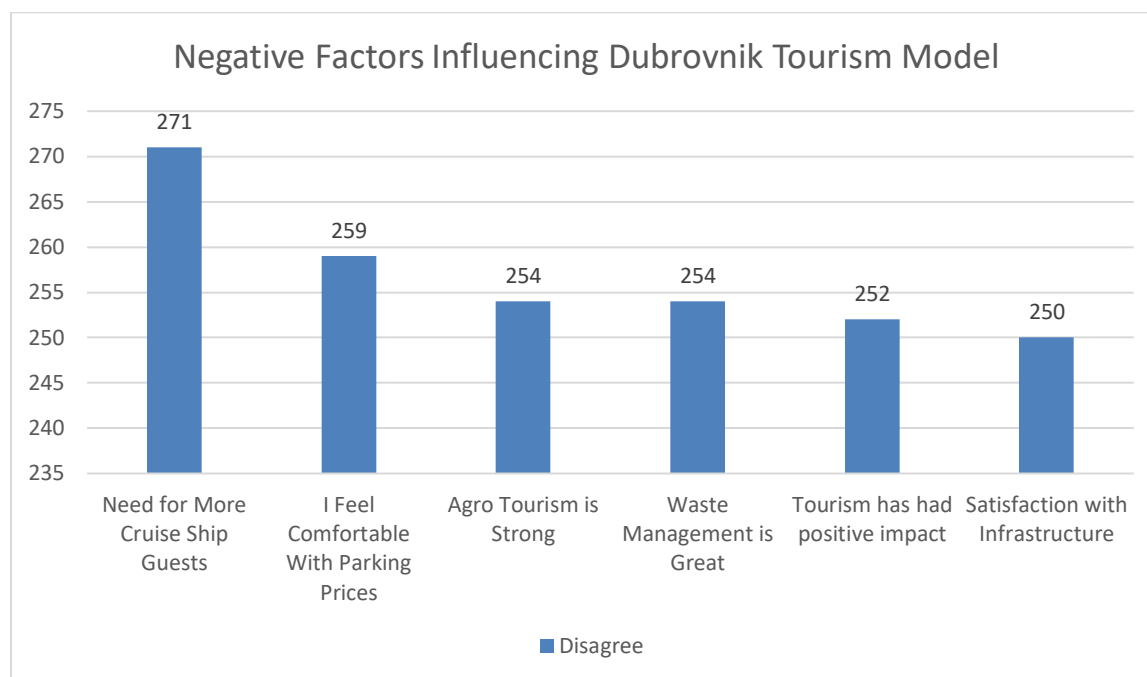
**Chart 7. Should Dubrovnik shift towards a sustainable tourism model**



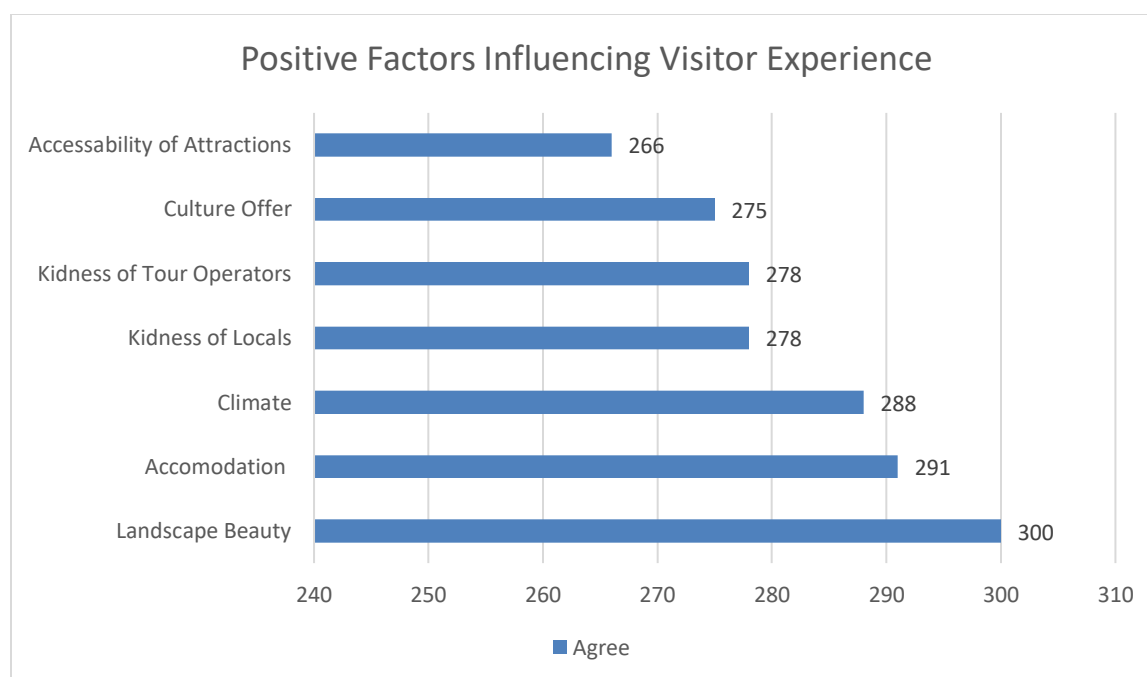
**Chart 8 Positive factors influencing Dubrovnik Tourism Model from Local Perspective**



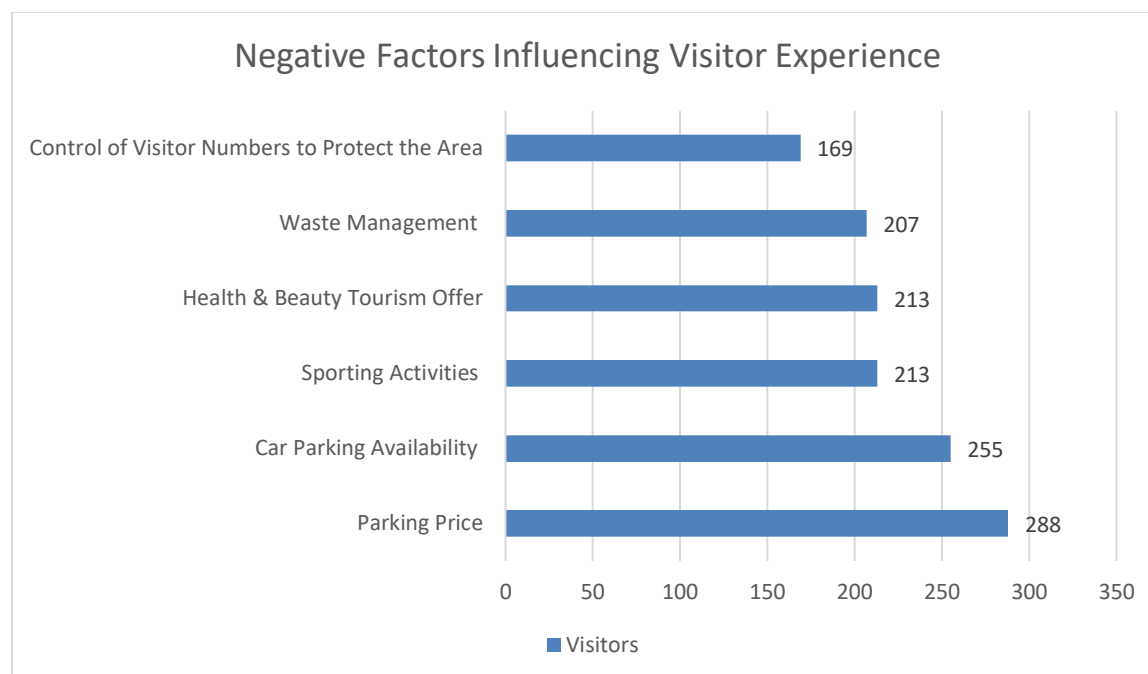
**Chart 9 Negative factors influencing Dubrovnik Tourism Model from Local Perspective**



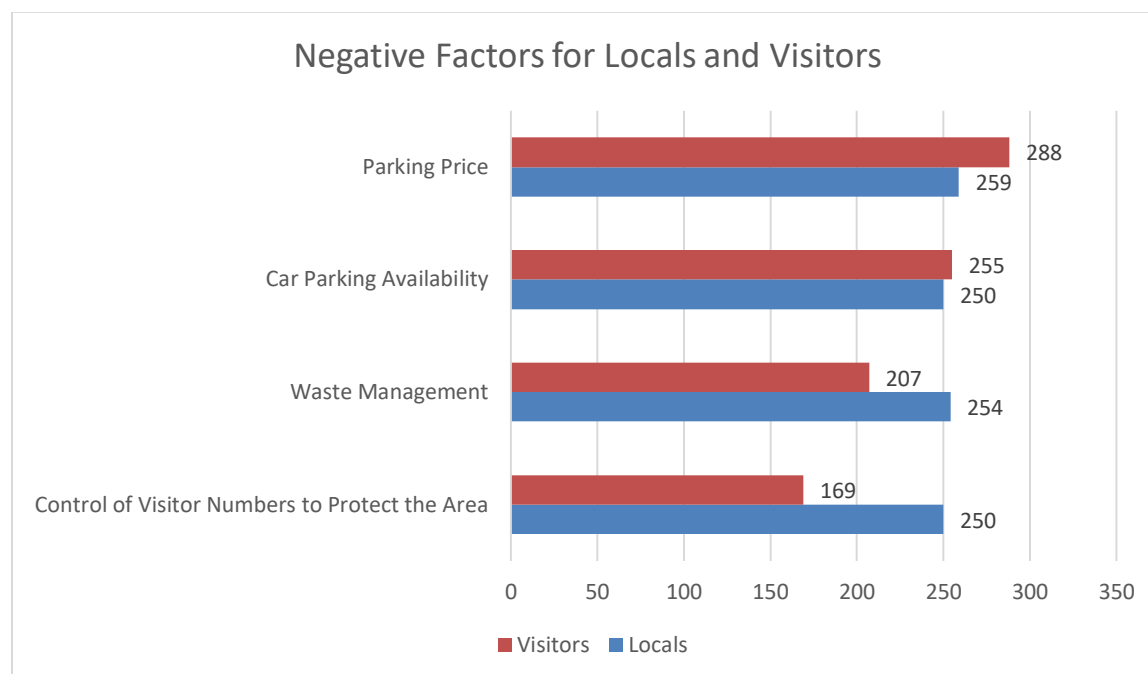
**Chart 10. Positive factors influencing Dubrovnik Tourism Model from Visitor Perspective**



**Chart 11 Negative factors influencing Dubrovnik Tourism Model from Visitor/Local Perspective**



**Chart 12 Negative factors influencing Dubrovnik Tourism Model from Local and Visitor Perspective**



**Table 1. The most significant incomes coming from cruise ships are the following:**

Fee Type	Amount
Pilot Fee	800 Euros
Local Navigation and Lighthouse usage	From 2000 to 3000 Euros
Docking Fee (Depends on ship size and amount of people being on a cruise ship)	1000 Euros
Taxes and Hours Stayed in Location	From 8000 to 10000 Euros
Garbage Disposal Fee	From 50 euros for m3
Water and Electricity Fee	4 euros per m3

**Table 2. Visitor location is based on countries from which they visited Dubrovnik during the summer season 2020.**

Country	Number of Respondents	Total Number
22. UK	40	300
23. USA	36	300
24. Spain	35	300
25. Poland	33	300
26. Croatia	29	300
27. France	28	300
28. Ireland	12	300
29. Austria	11	300
30. Australia	11	300
31. Sweden	10	300
32. Germany	9	300
33. Belgium	7	300
34. Canada	6	300
35. Czech Republic	6	300
36. Hungary	5	300
37. Norway	5	300
38. Finland	4	300
39. Italy	4	300
40. Slovenia	3	300
41. New Zealand	3	300
42. Lithuania	3	300

**Table 3. Benefits for implementing Sustainable Tourism-Local perspective**

Factor	Importance in %	Total Respondents
Culture and Cultural Heritage	<b>73.18%</b> or 221 respondents	100% or 300
Nature Preservation	<b>70.86%</b> or 214 respondents	100% or 300
Ecotourism	<b>52.98%</b> or 160 respondents	100% or 300
Environment and CO2 Emissions	<b>44.37%</b> or 134 respondents	100% or 300
Politics	<b>9.93%</b> or 30 respondents	100% or 300

**Table 4. Age groups and countries for respondents who visited Dubrovnik based on friends and family recommendations.**

Country	Number of Respondents	Total Respondents
1.UK	27	187
2.Croatia	26	187
3.Spain	25	187
4.USA	18	187
5.France	15	187
6.Poland	13	187
7.Australia	8	187
8.Austria	7	187
9.Sweden	6	187
10.Ireland	6	187
11.Canada	5	187
12.Italy	4	187

12.Belgium	4	187
12.Czech Republic	4	187
12.Hungary	4	187
12. Germany	4	187
13.Finland	3	187
13.Norway	3	187
13. New Zealand	3	187

**Table 5. Age groups and countries for respondents who visited Dubrovnik based on Internet promotions.**

<b>Country</b>	<b>Number of Respondents</b>	<b>Age Groups of Respondents</b>
1.Poland	20 out of 105	26-35 (15 out of 20) 36-45 (5 out of 20)
2.France	18 out of 105	16-25 (3 out of 18) 26-35 (9 out of 18) 36-45 (2 out of 18) 46-55 (4 out of 18)
3.Ireland	15 out of 105	26-35 (14 out of 15) 36-45 (1 out of 15)
4.USA	13 out of 105	16-25 (1 out of 13) 26-35 (2 out of 13) 36-45 (7 out of 13) 46-55 (3 out of 13)
5.UK	8 out of 105	26-35 (3 out of 8) 36-45 (5 out of 8)
6.Spain	5 out of 105	16-25 (1 out of 5) 26-35 (4 out of 5)

7.Austria	4 out of 105	16-25 (1 out of 4) 26-35 (3 out of 4)
7.Germany	4 out of 105	16-25 (1 out of 4) 26-35 (1 out of 4) 36-45 (1 out of 4) 55-65 (1 out of 4)
8.Belgium	3 out of 105	36-45 (1 out of 3) 55-65 (2 out of 3)
8.Lithuania	3 out of 105	55-65 (3 out of 3)
9.Sweden	2 out of 105	36-45 (2 out of 2)
9.Czech Republic	2 out of 105	26-35 (1 out of 2) 36-45 (1 out of 2)
9.Slovenia	2 out of 105	26-35 (2 out of 2)
9.Scotland	2 out of 105	36-45 (2 out of 2)
10.Norway	1 out of 105	36-45 (1 out of 1)
10.Finland	1 out of 105	36-45 (1 out of 1)
10.Hungary	1 out of 105	26-35 (1 out of 1)
10.Switzerland	1 out of 105	26-35 (1 out of 1)

**Table 6. Number of respondents who spent 50-100 euros/daily per country and age groups**

Country	Number of respondents	Age per respondents	Amount Spent In Euros/Daily
1.USA	15	16-25 (3) 26-35 (4) 36-45 (3) 46-55 (2) 55-65 (2) +65 (1)	50-100
2.Croatia	12	16-25 (8)	50-100



		26-35 (2) 36-45 (2)	
3.Spain	10	26-35 (6) 36-45 (2) 46-55 (2)	50-100
4.Poland	9	26-35 (4) 36-45 (3) 46-55 (2)	50-100
5.UK	7	26-35 (2) 36-45 (1) 46-55 (3) 55-65 (1)	50-100
6.Australia	6	26-35 (1) 36-45 (1) 46-55 (2) 55-65 (2)	50-100
7.France	5	16-25 (1) 26-35 (1) 36-45 (1) 46-55 (2)	50-100
7.Canada	5	16-25 (1) 46-55 (1) 55-65 (2) +65 (1)	50-100
8.Austria	4	16-25 (1) 26-35 (1) 36-45 (2)	50-100
8.Germany	4	26-35 (1) 36-45 (2) 55-65 (1)	50-100

9.Sweden	3	26-35 (1) 36-45 (2)	50-100
10.Norway	2	26-35 (2)	50-100
10.Switzerland	2	26-35 (2)	50-100
11.Ireland	1	46-55 (1)	50-100
11.Slovenia	1	16-25 (1)	50-100
11.Hungary	1	26-35 (1)	50-100

**Table 7. Number of respondents who spent +100 euros/daily per country and age groups**

<b>Country</b>	<b>Number of respondents</b>	<b>Age per respondents</b>	<b>Amount Spent In Euros/Daily</b>
1.USA	12	36-45 (4) 46-55 (1) 55-65 (3) +65 (4)	+100
2. Poland	7	26-35 (4) 36-45 (3)	+100
3.UK	5	26-35 (1) 46-55 (4)	+100
4. Spain	2	46-55 (1) 55-65 (1)	+100
4. Belgium	2	55-65 (2)	+100
5. France	2	55-65 (2)	+100
5. Norway	1	36-45 (1)	+100
5. Canada	1	46-55 (1)	+100
5. Croatia	1	16-25 (1)	+100

**Table 8. A number of respondents per country for visiting factor of “Holiday and Relaxation”.**

<b>Country</b>	<b>Number of Respondents</b>	<b>Visiting Factor</b>
1.USA	36/261	Holiday and Relaxation
2.UK	34/261	Holiday and Relaxation
3.Poland	31/261	Holiday and Relaxation
4.Spain	28/261	Holiday and Relaxation
5.France	23/261	Holiday and Relaxation
6.Croatia	22/261	Holiday and Relaxation
7.Ireland	10/261	Holiday and Relaxation
8.Sweden	9/261	Holiday and Relaxation
8.Asutria	9/261	Holiday and Relaxation
9.Germany	8/261	Holiday and Relaxation
10.Belgium	7/261	Holiday and Relaxation
11.Canada	6/261	Holiday and Relaxation
11.Czesh Republic	6/261	Holiday and Relaxation
11.Norway	6/261	Holiday and Relaxation
11.Australia	6/261	Holiday and Relaxation
12.Switzerland	5/261	Holiday and Relaxation
13.Slovenia	4/261	Holiday and Relaxation
13.Italy	4/261	Holiday and Relaxation
13.Hungary	4/261	Holiday and Relaxation
14.Finalnd	3/261	Holiday and Relaxation

**Table 9. A number of respondents per country for visiting factor of “Cultural Offer”.**

<b>Country</b>	<b>Number of Respondents</b>	<b>Visiting Factor</b>
1.USA	25/137	Cultural Offer
2.UK	16/137	Cultural Offer
3.Spain	14/137	Cultural Offer
4.Croatia	12/137	Cultural Offer
5.France	11/137	Cultural Offer
6.Australia	9/137	Cultural Offer
7.Poland	8/137	Cultural Offer
8.Germany	7/137	Cultural Offer
9.Canada	6/137	Cultural Offer
10.Austria	5/137	Cultural Offer
11.Switzerland	4/137	Cultural Offer
12.Sweden	3/137	Cultural Offer
12.Ireland	3/137	Cultural Offer
12.Norway	3/137	Cultural Offer
12.Slovenia	3/137	Cultural Offer
12.Italy	3/137	Cultural Offer
12.Hungary	3/137	Cultural Offer
13.Czech Republic	2/137	Cultural Offer
13.Belgium	2/137	Cultural Offer

**Table 10. resident opinions about an aspect of the sustainable tourism model**

	<b>Strongly Disagree 1</b>	<b>Disagree 2</b>	<b>Neither agree nor disagree 3</b>	<b>Agree 4</b>	<b>Strongly Agree 5</b>	<b>Total Results</b>
	$\Sigma$ %	$\Sigma$ %	$\Sigma$ %	$\Sigma$ %	$\Sigma$ %	$\emptyset$ $\pm$
I often feel intruded on tourism in the city?	7 2.32%	3 10.26%	65 21.52%	114 37.75%	85 28.15%	3.79 1.04
My quality of life has deteriorated because of tourism?	22 7.28%	64 21.19%	65 21.52%	87 28.81%	64 21.19%	3.35 1.23
I believe tourism is a strong economic contributor?	3 0.99%	4 1.32%	5 1.66%	118 39.07%	172 56.95%	4.5 0.69
Tourism has improved the living standard of the local community?	3 0.99%	13 4.3%	33 10.93%	114 37.75%	139 46.03%	4.24 0.88
Tourism needs to be developed in harmony with the natural and cultural environment?	2 0.66%	1 0.33%	8 2.66%	92 30.56%	198 65.78%	4.6 0.63
Tourism has had a negative impact on the natural environment?	4 1.32%	18 5.96%	52 17.22%	129 42.72%	99 32.78%	4 0.93
Tourism has had a positive impact on the natural environment?	60 19.87%	111 36.75%	83 27.48%	36 11.92%	12 3.97%	2.43 1.06
Tourism should be in place for an entire year?	23 7.62%	20 6.62%	50 16.56%	130 43.05%	79 26.16%	3.74 1.14
Does Dubrovnik need more Cruise ship guests?	138 45.7%	89 29.47%	46 15.23%	18 5.96%	11 3.64%	1.92 1.08
Dubrovnik can expand its offer on the Konavle region?	5 1.66%	3 0.99%	27 8.94%	142 47.02%	125 41.39%	4.25 0.79
Agro tourism is strong in Dubrovnik?	20 6.62%	109 36.09%	127 42.05%	41 13.58%	5 1.66%	2.68 0.85
I am satisfied with the infrastructure in Dubrovnik city?	78 25.83%	105 34.77%	69 22.85%	36 11.92%	14 4.64%	2.35 1.12

I support discounts for local people?	9 2.98%	11 3.64%	15 4.97%	91 30.13%	176 58.28%	4.37 0.95
I feel comfortable with parking prices in Dubrovnik?	137 45.36%	86 28.48%	38 12.58%	28 9.27%	13 4.3%	1.99 1.16
Public transportation is well organized?	55 18.21%	75 24.83%	70 23.18%	84 27.81%	18 5.96%	2.78 1.2
Waste management is great (during the summer season)?	76 25.17%	93 30.79%	87 28.81%	36 11.92%	10 3.31%	2.37 1.08
Dubrovnik should shift from sun and sea to alternative and sustainable tourism?	3 0.99%	19 6.29%	71 23.51%	120 39.74%	89 29.47%	3.9 0.93
Dubrovnik should diversify its tourism offer?	1 0.33%	5 1.66%	39 12.91%	138 45.7%	119 39.4%	4.22 0.75
Dubrovnik should reduce the number of cruise ships?	2 0.66%	17 5.63%	50 16.56%	87 28.81%	146 48.34%	4.19 0.95
Does Dubrovnik need a better organization during the summer?	1 0.33%	2 0.66%	27 8.94%	103 34.11%	169 55.96%	4.45 0.71

Table 11. Visitor level opinions about Dubrovnik tourism offer

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly Agree 5	Total Results
	Σ %	Σ %	Σ %	Σ %	Σ %	Ø ±
Climate	5 1.63%	4 1.31%	9 2.94%	52 16.99%	236 77.12%	4.67 0.75
Kindness of the local people	5 1.63%	6 1.96%	17 5.56%	102 33.33%	176 57.52%	4.43 0.82
Kindness of the tour operators	4 1.32%	2 0.66%	77 25.33%	144 47.37%	77 25.33%	3.95 0.81

<b>Tour operators knowledge of foreign languages</b>	2 0.66%	1 0.33%	108 35.53%	131 43.09%	62 20.39%	3.82 0.77
<b>Road infrastructure</b>	8 2.61%	53 17.32%	65 21.24%	142 46.41%	38 12.42%	3.49 1
<b>Local traffic</b>	9 2.94%	67 21.9%	67 21.9%	146 47.71%	17 5.56%	3.31 0.97
<b>Car parking availability</b>	103 33.77%	85 27.87%	72 23.61%	44 14.43%	1 0.33%	2.2 1.07
<b>Car parking price</b>	176 57.89%	52 17.11%	64 21.05%	11 3.62%	1 0.33%	1.71 0.94
<b>Public transportation</b>	8 2.62%	28 9.18%	75 24.59%	159 52.13%	35 11.48%	3.61 0.9
<b>Price of public transportation</b>	2 0.66%	2 0.66%	86 28.2%	151 49.51%	28 9.18%	3.54 0.85
<b>Information provided before coming to destination</b>	4 1.31%	3 0.98%	46 15.03%	172 56.21%	81 26.47%	4.06 0.75
<b>Visiting the area as quickly as possible</b>	3 0.98%	9 2.94%	53 17.32%	171 55.88%	70 22.88%	3.97 0.78
<b>Events in destination</b>	6 1.96%	21 6.86%	93 30.39%	136 44.44%	50 16.34%	3.66 0.9
<b>The control of visitor numbers to protect the area</b>	20 6.56%	43 14.1%	111 36.39%	106 34.75%	25 8.2%	3.24 1.01
<b>Culture offer</b>	3 0.98%	4 1.31%	23 7.54%	81 26.56%	194 63.61%	4.5 0.77
<b>Waste management</b>	19 6.21%	88 28.76%	106 34.64%	69 22.55%	24 7.84%	2.97 1.04
<b>Accessibility of the attractions</b>	2 0.66%	8 2.62%	29 9.51%	136 44.59%	130 42.62%	4.26 0.79
<b>Landscape beauty</b>	2 0.65%	1 0.33%	2 0.65%	33 11.11%	267 87.25%	4.84 0.5
<b>Accommodation</b>	3 0.98%	2 0.65%	10 3.27%	64 20.92%	227 74.18%	4.67 0.67
<b>Amusement activities</b>	2 0.65%	14 4.58%	96 31.37%	103 33.66%	91 29.74%	3.87 0.91
<b>Sporting activities</b>	5 1.64%	41 13.49%	171 56.25%	74 24.34%	13 4.28%	3.16 0.77

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<b>Health and beauty tourism offer</b>	5 1.65%	40 13.2%	171 56.44%	71 23.43%	16 5.28%	3.17 0.78
<b>Local gastronomy offer</b>	2 0.65%	10 3.27%	25 8.17%	99 32.35%	170 55.56%	4.39 0.82
<b>Quality-price ratio</b>	8 2.61%	20 6.54%	23 7.52%	208 67.97%	47 15.36%	3.87 0.84



## Local Resident Survey Example

### “Dubrovnik Vision 2030”

**1) Gender**

- ☐ Male
- ☐ Female

**2) Occupation**

- ☐ Mayor Office
- ☐ Tourism Board Employee
- ☐ Local Business Owner
- ☐ Other \_\_\_\_\_

**3) Age**

- ☐ 16-25 years
- ☐ 26-35 years
- ☐ 36-45 years
- ☐ 46-55 years
- ☐ 56-65 years
- ☐ Over 65 years

**4) Place of residence**

- ☐ Old City
- ☐ Outside of the Old City
- ☐ Suburban area

**5) What is your personal opinion about Sustainable Tourism?**

- ☐ It is very important and it should be the future standard of travel
- ☐ It is important
- ☐ I don't care
- ☐ I don't think it is important at all

**6) If you think Sustainable Tourism is important, which field do you care most about? (multiple answers are possible)**

- ☐ Environment and CO2 Emissions

- Nature Preservation
- Ecotourism
- Culture and Cultural Heritage
- Politics

**7) When you book a holiday do you consider booking certain offers, tours, or accommodation because they are more sustainable?**

- I always look for sustainable offers, tours, and accommodations
- If I have a choice to choose between similar offers I choose the more sustainable one
- I don't care

**8) Would you be willing to pay more for travel if it is more sustainable?**

- Yes
- No
- I don't care

**9) When you think about the listed factors in the table below, how important to you are each of the following aspects? One stands for not important at all and five stands for essential.**

		Not Important at all	Somewhat Important	Neutral	Very Important	Essential
	Question	1	2	3	4	5
1	I often feel intruded with tourism in the city.					
2	My quality of life has deteriorated because of tourism.					
3	I believe tourism is a strong economic contributor.					
4	Tourism has improved the living standard of the local community.					
5	Tourism needs to be developed in harmony with the natural and cultural environment					
6	Tourism had had a negative impact on the natural environment					

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7	Tourism has had a positive impact on the natural environment					
8	Tourism should be in place for the entire year					
9	Dubrovnik needs more Cruise ship guests					
10	Dubrovnik can expand its offer in the Konavle region					
11	Agro tourism is strong in Dubrovnik					
12	I am satisfied with the infrastructure in Dubrovnik city					
13	I support discounts for local people					
14	I feel comfortable with parking prices in Dubrovnik					
15	Public transportation is well organized					
16	Waste management is great					
17	Dubrovnik should shift from sun and sea to alternative and sustainable tourism					
18	Dubrovnik should diversify its tourism offer					
19	Dubrovnik should reduce the number of cruise ships					
20	Dubrovnik needs better organization during the summer season					

## Visitor Survey Example

### “Dubrovnik Vision 2030”

1) Which country do you come from? \_\_\_\_\_

**2) Age**

- ☐ 16-25 years
- ☐ 26-35 years
- ☐ 36-45 years
- ☐ 46-55 years
- ☐ 56-65 years
- ☐ over 65 years

**3) Gender**

- ☐ Male
- ☐ Female

**4) Number of nights stay in Dubrovnik**

- ☐ 1 night
- ☐ 1-3 nights
- ☐ 4-7 nights

**5) Average daily cost per person in Dubrovnik**

- ☐ Less than 30 €
- ☐ 30-50 €
- ☐ 50-100 €
- ☐ more than 100 €

**6) What type of accommodation did you stay in?**

- ☐ Hotel
- ☐ B&B
- ☐ Apartment
- ☐ Friends and Family
- ☐ Other \_\_\_\_\_

**7) How did you hear about Dubrovnik as a tourism destination?**

- ☐ Recommended by friends and family
- ☐ Tourism trade fair
- ☐ Dubrovnik Tourism Board
- ☐ Travel agency
- ☐ Internet
- ☐ Other \_\_\_\_\_

**8) Type of holiday?**

- ☐ Self-oriented

- Organized (through a travel agency)

**9) Reasons why you choose to come to Dubrovnik?**

- Holiday and relaxation
- Entertainment
- Cultural offer
- Sporting offer
- Health and beauty
- Business
- Visiting friends and family
- Gastronomic offer
- Other \_\_\_\_\_

**10) What is your personal opinion about Sustainable Tourism?**

- It is very important and it should be the future standard of travel
- It is important
- I don't care
- I don't think it is important at all

**11) If you think Sustainable Tourism is important, which field do you care most about? (multiple answers are possible)**

- Environment and CO2 Emissions
- Nature Preservation
- Ecotourism
- Culture and Cultural Heritage
- Politics

**12) When you book a holiday do you consider booking certain offers, tours, or accommodation because they are more sustainable?**

- I always look for sustainable offers, tours, and accommodations
- If I have a choice to choose between similar offers I choose the more sustainable one
- I don't care

**13) Would you be willing to pay more for travel if it is more sustainable?**

- Yes
- No

**14) What was your main mode of travel to Dubrovnik's destination?**

- Car
- Plain
- Cruise ship
- Bus

**15) What was your main mode of transportation to the destination?**

- Car
- Public transportation
- Cycling
- Walking

**16) How would you rate your level of satisfaction about what Dubrovnik as a tourism destination has to offer? 1 stand for very unsatisfied and 5 stands for very satisfied.**

		<b>Very Unsatisfied</b>	<b>Unsatisfied</b>	<b>Neutral</b>	<b>Satisfied</b>	<b>Very Satisfied</b>
	<b>Question</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Climate					
2	The kindness of the local people					
3	The kindness of the tour operators					
4	Tour operators knowledge of foreign languages					
5	Road infrastructure					
6	Local traffic					
7	Car parking availability					
8	Car parking price					
9	Public transportation					
10	Price of public transportation					
11	Information provided before coming to a destination					
12	Visiting the area as quickly as possible					
13	Events in destination					
14	The control of visitor numbers to protect the area					
15	Culture offer					
16	Waste management					

17	Accessibility of the attractions					
18	Landscape beauty					
19	Accommodation					
20	Amusement activities					
21	Sporting activities					
22	Health and beauty tourism offer					
23	Local gastronomy offer					
24	Quality-price ratio					

**17) Do you consider that Dubrovnik should shift towards Sustainable tourism model?**

- ☐ Yes
- ☐ No
- ☐ Other \_\_\_\_\_

**18) Will you visit Dubrovnik again in near future?**

- ☐ Yes
- ☐ No
- ☐ Maybe
- ☐ Other \_\_\_\_\_

**19) Will you recommend Dubrovnik as tourism destination to your friends and family?**

- ☐ Yes
- ☐ No
- ☐ Other \_\_\_\_\_

**20) Do you relate Dubrovnik to the subject of mass tourism destination?**

- ☐ Yes
- ☐ No
- ☐ I don't know